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PATENT ABSTRACTS OF JAPAN

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(21)Application number : **05-127525** (71)Applicant : **SANKYO KK**

(22)Date of filing : **28.05.1993** (72)Inventor : **UGAWA SHOHACHI**

(54) **GAME MACHINE**

(57)Abstract:

PURPOSE: To prevent such inconvenience as variability of a game becomes scarce caused by a fact that probability by which the result of display of a variable display device becomes a specific display state is determined uniformly.

CONSTITUTION: When the result of the display of a game frequency variable indicator becomes '77' (S195M), a probability fluctuation counter is set to '2' (S195N), control for improving big bonus game generation probability by two

times is executed, and when the result of display becomes '33' (S195O), the probability fluctuation counter is set to '1' (S195P), and control for improving the big bonus game generation probability by one is executed.

CLAIMS

[Claim(s)]

[Claim 1] It is the game machine which one game ends after having the adjustable display from which a display condition can change, carrying out the display control of this adjustable display and giving a derivation indication of the display result. The number input means of bets for inputting the number of bets which is a number corresponding to the magnitude of valuable worth of game person possession risked on the game result of said one game, A value grant means to give valuable predetermined value when a display-control means to control said adjustable display, and the display result of said adjustable display become the specific display mode defined beforehand, The game machine characterized by including the probability fluctuation control means which fluctuates the probability for the display result of said adjustable display to serve as said specific display mode when the game condition of said game machine changes into the special game condition defined beforehand.

DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Industrial Application] This invention relates to the game machine which one game ends in detail after having the adjustable display from which a display condition can change, carrying out the display control of this adjustable display and giving a derivation indication of the display result about the game machine

represented with a slot machine etc.

[0002]

[Description of the Prior Art] In this kind of game machine, to what is generally known from the former, for example A game person inputs the number of bets which supplies valuable worth of game person possession [coin etc.], and is risked on the game result of one game. Next, it is stopped after adjustable initiation of the adjustable display is carried out by performing predetermined start actuation. When the display result of the adjustable display became the specific display mode defined beforehand, there were some which were constituted so that valuable predetermined value, such as expenditure of premium coin, might be given to a game person and one game might be completed.

[0003]

[Problem(s) to be Solved by the Invention] In this kind of conventional game machine, an adjustable display serves as said specific display mode by a certain fixed probability, it is constituted so that valuable predetermined value may be given to a game person, and the probability for said specific display mode to appear was defined uniformly. Consequently, the game had the fault from which variability becomes a scarce game machine with little quite satisfactory enjoyment.

[0004] This invention is that are invented in view of the starting actual condition, and the object originates in the probability used as the specific display mode based on the display result of an adjustable display being defined uniformly, and the variability of a game prevents becoming scarce.

[0005]

[Means for Solving the Problem] This invention is a game machine which one game ends after having the adjustable display from which a display condition can change, carrying out the display control of this adjustable display and giving a derivation indication of the display result. The number input means of bets for inputting the number of bets which is a number corresponding to the magnitude of valuable worth of game person possession risked on the game result of said

one game. A value grant means to give valuable predetermined value when a display-control means to control said adjustable display, and the display result of said adjustable display become the specific display mode defined beforehand. When the game condition of said game machine changes into the special game condition defined beforehand, it is characterized by including the probability fluctuation control means which fluctuates the probability for the display result of said adjustable display to serve as said specific display mode.

[0006]

[Function] According to this invention, the input of the number of bets which is a number corresponding to the magnitude of valuable worth of game person possession risked on the game result of one game is attained with the number input means of bets. And when the display result of the adjustable display controlled by the display-control means becomes the specific display mode defined beforehand, valuable predetermined value is given to a game person. Furthermore, when the game condition of a game machine changes into the special game condition defined beforehand by work of a probability fluctuation control means, the probability for the display result of said adjustable display to serve as said specific display mode is changed.

[0007]

[Example] Next, the example of this invention is explained to a detail based on a drawing.

[0008] Drawing 1 is the whole front view showing an example of the slot machine concerning this invention. Front frame 1B of an example of a covering member is prepared in machine frame 1A of a slot machine 1 free [closing motion], and the display window is prepared in the predetermined part by the side of the front face of the upper part part of the front frame. The adjustable displays 5L, 5C, and 5R for making a game person check by looking identification information, such as a pattern by which it is indicated by adjustable with the adjustable display 90 (refer to drawing 2), are formed in this display window. This left adjustable display 5L, inside adjustable display 5C, and right adjustable display 5R is constituted by the magnitude [three steps of upper and

lower sides] which can adjustable display identification information at each. Front frame 1B is locked in the state of closing at the time, when the official in charge of an amusement center inserts a predetermined key in keyhole 3a for door opening close and operates it, release is usually carried out, and Kaisei of front frame 1B becomes possible. And the switching condition of front frame 1B is detected by the door switch 44.

[0009] The card processor 76 is installed in the left-hand side of a slot machine. This card processor 76 is for playing the game by the slot machine 1 possible using valuable worth of game person possession specified by the recording information currently recorded on the common card. In addition, a common card is a prepaid card of an usable third party issuance mold in the amusement center of the whole country which has joined in the common card system. When a game person performs a game, while it purchases a common card with a common card vending machine etc. first and it is blinking [the activity good drop 77 was on or], the purchased common card is inserted in common card insertion and an exhaust port 79. Then, the recording information of the inserted common card is read by the card reader writer 78. The card processor control section 80 which becomes this card processor 76 from the microcomputer which contains CPU, ROM, RAM, etc. is formed, and a card reader is controlled by this card processor control section 80. And if a game person does press actuation of the loan carbon button 71, the actuation will be detected by the loan switch 72 and the coin of the number of predetermined leaves will pay out of the coin expenditure opening 29 in the coin reservoir pan 30 based on the detection output. The valuable value equivalent to the paid-out coin is reduced from the valuable value specified by the recording information of the common card inserted in card insertion and an exhaust port 79. And while the charge indicator lamp 19 was on or is blinking, a game person throws in the coin from a coin slot 18. This charge indicator lamp 19 is switched off when three coin is thrown in (at the event of one sheet being supplied in the bonus game mentioned later). If a game person throws in coin and does press actuation of the start lever 12, adjustable initiation of the adjustable display 90 will be carried out, and an

adjustable indication of two or more kinds of identification information will be given by each adjustable displays 5L-5R. Next, if a game person does press actuation of each stop buttons 9L, 9C, and 9R, it is constituted so that the adjustable display of each adjustable displays 5L, 5C, and 5R corresponding to it may be suspended. In addition, if a game person does press actuation of neither of the stop buttons, 9L nor-9R, halt control of the adjustable display 70 is automatically carried out by the predetermined passage of time. One game is completed by one adjustable halt suspended after adjustable initiation of this adjustable display 90 is carried out, and if it becomes specific identification information so that the display result at the time of an adjustable halt may mention later, grant of predetermined game value will be attained.

[0010] If a game person throws in one coin from a coin slot 18 in the case of the usual game (coin game) which is not a credit game mentioned later and press actuation of the start lever 12 is carried out, the effective line (hit line) of width 1 train of the middle in the adjustable displays 5L-5R will become effective. When the combination of the specific identification information as which the identification information displayed at the time of a halt of the adjustable display 90 was beforehand determined on the effective line of width 1 train of this middle is organized, it will be in the condition which can give predetermined game value, such as expenditure of the coin of the initiation of a big bonus game or a bonus game or the number of predetermined leaves mentioned later. On the other hand, if a game person does press actuation of the start lever 12 where coin is thrown into the two-sheet coin slot 18, the effective line of width 3 train in the adjustable displays 5L-5R becomes effective, and the display result at the time of a halt of the adjustable display 90 will be in the condition which can give predetermined game value, when the combination of specific identification information is organized on one line of the effective lines of this width 3 train. Furthermore, if a total of five effective lines of two trains will become effective on width 3 train in the adjustable displays 5L-5R, and the slanting diagonal line if a game person does press actuation of the start lever 12 where three coin is thrown into a coin slot 18, and the combination of specific

identification information is organized on one in these five effective lines of lines, it will be in the condition which can give predetermined game value. Namely, if a game person throws in one coin and does press actuation of the start lever 12, it will become the so-called game of an one-sheet bet. If one effective line becomes effective, two coin is thrown in, will become the so-called game of a two-sheet bet if press actuation of the start lever 12 is carried out, and three effective lines become effective, three coin is thrown in and press actuation of the start button 12 is carried out It becomes the so-called game of a three-sheet bet, and all five effective lines become effective.

[0011] The slot machine 1 in this example is constituted so that the so-called credit game may also be made. A credit game is a game which performs a game using the valuable value accumulated beforehand, without accumulating the coin which throws in the coin of a large quantity beforehand, and is accumulated as valuable value, or is given as a prize as valuable value, and throwing in coin one by one. If a game person can switch to a credit game from the usual game and press actuation of this game change carbon button 16 is further carried out again by carrying out press actuation of the game change carbon button 16 once, he can switch to the usual game from a credit game. It becomes the game of one bet which could be made to memorize the value for 50 sum total coin beforehand in the case of a credit game, and mentioned above the credit manual operation button 14 by carrying out press actuation once, and it becomes the game of two bets mentioned above by pressing the credit manual operation button 14 twice, and becomes the game of three bets which mentioned the credit manual operation button above by carrying out press actuation 3 times. In addition, a credit manual operation button is prepared corresponding to each number of bets, and it may become the game of one bet by pressing the credit manual operation button for 1 bets, and may become the game of two bets by pressing the credit manual operation button for 2 bets, and by pressing the credit manual operation button for 3 bets, you may constitute so that the game of three bets may be made. The number input means of bets for inputting the number of bets which is a number corresponding

to the magnitude of valuable worth of game person possession risked on the game result of said one game with the start lever 12, a coin slot 18, or the credit manual operation button 12 is constituted.

[0012] The inside 21-23 of drawing is an effective line display lamp, only the effective line display lamp corresponding to the effective line which becomes effective according to the number of bets mentioned above lights up or blinks, and it is constituted so that a game person can recognize which effective line is effective. 11L, 11C, and 11R are for switching on the light or flash displaying the purport which are a left actuation effective lamp, an inside actuation effective lamp, and a right actuation effective lamp, and changed into the condition of receiving effectively press actuation of the stop buttons 9L, 9C, and 9R corresponding to each at each. In addition, in addition to lamp display etc., the information of this actuation validity is replaced with it, and you may make it a sound report it. Moreover, a lamp etc. may be switched to a burning condition from a flash condition, or changing a color may report. 25 in drawing is a count of a game, and an adjustable indicator, and it is constituted so that the value of the big bonus game counter mentioned later or a bonus game (regular bonus game) counter may be displayed and the count of the big bonus game which is carrying out current activation, or a bonus game can be indicated by change. Moreover, this count of a game and adjustable indicator 25 are used also as what performs the adjustable display for giving a lottery indication of whether the probability for the display result of adjustable displays, such as the probability of occurrence of a big bonus game, to serve as a specific display mode so that it may mention later is fluctuated. For example, ten kinds of adjustable displays of "00" - "99" are possible for this count of a game and adjustable drop 25, it performs probability fluctuation control twice by "77", performs probability fluctuation once by "33", and controls it by other displays not to perform probability fluctuation. Moreover, 70 in drawing is a loan good drop, and is for switching on the light or flash indicating whether it can lend out coin using valuable worth of game person possession specified with the common card inserted in card insertion and an exhaust port 79. 75 is a balance

drop and is for displaying valuable worth (balance) of game person possession specified based on the recording information of the common card inserted by card insertion and the exhaust port 79. It is a return carbon button, and when a game person does press actuation of this return carbon button 73, that actuation is detected from the return switch 74, the common card inserted in card insertion and an exhaust port 79 based on that detecting signal is discharged at a game person side, and 73 is returned. 26 is a credit indicator and is for displaying the number of sheets of the coin as valuable value at the time of a credit game memorized. 27 is an expenditure numeral machine and is for displaying the coin number of sheets given when winning a prize is materialized. In addition, when winning a prize is materialized in the case of the usual game which is not a credit game, the coin number of sheets which the coin of the number of predetermined leaves (for example, 15 sheets) pays to the coin reservoir pan 30 out of the coin expenditure opening 29 and by which it is given within limits which do not exceed a storage upper limit (50 sheets) in the case of a credit game is memorized. In addition, in exceeding the upper limit (50 sheets) of the storage, the coin to exceed pays out in the coin reservoir pan 30.

[0013] The front panel 2 is formed under the display window 71 by the side of the front face of a slot machine 1. Moreover, when it is the mode with game over later mentioned when the big bonus game mentioned later is completed and it becomes game over, unless reset action is performed, it will not be in the condition which can continue a re-game, and the reset action is performed by inserting a predetermined key in keyhole 3b for reset, and operating it in the counter clockwise direction. The actuation to the direction of a clockwise rotation of this keyhole 3b for reset is detected by the reset switch 4, a slot machine 1 is reset based on that detection output, and a game becomes again possible. Moreover, 28 in drawing is a loudspeaker and generating of the sound effect at the time of a bonus game, generating of the alarm tone at the time of abnormalities, etc. are performed at the time of winning a prize and a big bonus game. Moreover, two or more game effectiveness lamps 24 are formed above

the display window 71 by the side of the front face of a slot machine 1, and it switches on the light or displays [flash] at the time of generating of a big bonus game or a bonus game. Moreover, 20 in drawing is a game exaggerated lamp, and when a slot machine becomes the close (game over), it is switched on the light or flash displayed. As mentioned above, the number of bets to the game result in one game of a slot machine 1 is determined by how many sheet coin was thrown in from the coin slot 18 before press actuation of the start lever 12, or how many times press actuation of the credit manual operation button 14 was carried out in the credit game. 64 in drawing is a re-game display lamp, and when the re-game of it becomes possible so that it may mention later, a burning indication of it is given.

[0014] Drawing 2 is the whole rear view showing 1 circles section structure of a slot machine. It has the reels 6L, 6C, and 6R of plurality (a drawing three pieces), and the reel drive motors 7L, 7C, and 7R which consist of a stepping motor are formed in each reel 6L, 6C, and 6R, and the adjustable display 70 is constituted so that each reel 6L-6R may rotate and stop with each reel drive motor 7L-7R. The identification information which consists of two or more kinds of patterns as shown in drawing 3 is drawn on the periphery of each of these reels 6L-6R. And it is constituted so that an adjustable indication of the identification information currently drawn on this reel periphery may be given by said adjustable displays 5L-5R. The criteria location of each reel is detected, it is a reel location detection sensor, whenever each reels 6L-6R rotate one time, a criteria location is detected by these reel location detection sensors 8L-8R, and a detection output is drawn by the inside 8L, 8C, and 8R of drawing. The actuation will be detected by the stop switches 10L, 10C, and 10R if a game person does press actuation of the stop buttons 9L, 9C, and 9R. The actuation will be detected by the game circuit changing switch 17 if a game person does press actuation of the game change carbon button 16. The actuation will be detected by the start switch 13 if a game person does press actuation of the start lever 12. The actuation will be detected by the credit switch 15 if a game person does press actuation of the credit manual operation button 14. If the key

stroke for probability setting out is performed using the specific key which the manager of an amusement center etc. possesses, it will be detected by the key switch 43, a door switch 44 (for example, it consists of microswitches) is activity-ized in the condition, and when the manager of an amusement center etc. operates the activity-ized door switch 44, it is constituted so that it may become possible to carry out modification setting out of the winning-a-prize probability. 24 in drawing is the game effectiveness lamp, 25 is a count indicator of a game, 26 is a credit indicator, 27 is an expenditure numeral machine, and 21-23 are effective line display lamps. In addition, the error code which specifies the cause of an error when an error occurs so that it may mention later also displays the expenditure numeral machine 27.

[0015] The coin thrown in from the coin slot 18 is guided to the coin selector 32 through the coin trajectory 31. the coin with the thrown-in effective coin in the coin selector 32 -- or coin with un-proper fake coin etc. is distinguished, and in being un-proper coin, the passage change-over solenoid 33 is excited, and it lets a change pass for passage, lets the return trajectory 34 pass for the unsuitable forward coin, and returns from the coin expenditure opening 29 (refer to drawing 1). On the other hand, when charge coin is proper coin, the proper coin is guided to the coin taking-in trajectory 35 side, and the coin is taken in and stored in the coin reservoir tank 37. The charge coin sensor 36 of an example of the number input detection means of bets is formed in the coin taking-in trajectory 35, and the coin which passes this coin taking-in trajectory 35 is detected by this charge coin sensor 36. When the coin which is not a credit game and which usually exceeds three sheets at the time of a game is thrown in and the number of credits amounts to 50 on the other hand again at the time of a credit game, the passage change-over solenoid 33 is excited, passage switches, and the charge coin after the 4th sheet is returned through the return trajectory 34.

[0016] The coin hopper 37 becomes full and the surplus coin it became impossible to store coin more than it is stored by the surplus coin reservoir tank 41 through the surplus coin induction trajectory 40. If **** eclipse ****** and this

surplus coin reservoir tank 41 become [the full sensor 42] full at this surplus coin reservoir tank 41, error processing to which information of the purport that it was detected by the full sensor 42 and became full based on that detection output etc. is carried out will be performed. The official in charge of an amusement center collects the coin in the surplus coin reservoir tank 41 of the slot machine 1 which became full based on the information of the purport which became full.

[0017] The coin expenditure motor 38 is formed in the lower part part of the coin hopper 37, and when this coin expenditure motor 38 rotates, the coin in the coin hopper 37 is discharged in the addressing [to one sheet] coin reservoir pan 30 from the coin expenditure opening 29. When the coin discharged is detected by the expenditure coin sensor 39 and the expenditure coin of the number of predetermined leaves (for example, 15 sheets) is detected, halt control of the coin expenditure motor 38 is carried out. In addition, when the coin number of sheets which is memorized as a credit score in the case of the credit game exceeds the upper limit number of sheets (for example, 50 sheets) of the storage, the coin to exceed pays out in the coin reservoir pan 30 by the coin expenditure motor 38. 45 in drawing is a control section which controls a slot machine, and contains a microcomputer etc. In addition, 65 in drawing is an electric power switch, and, thereby, ON of the power source of a slot machine 1 and OFF of it are attained. Moreover, the electric power switch 65 and the key switch 43 consist of front-face sides operational by carrying out Kaisei of the front frame 18. For a balance drop and 77, as for a card reader writer and 79, an activity good drop and 78 are [75 / card insertion and an exhaust port, and 80] card processor control sections among drawing.

[0018] Drawing 3 is the development view showing the pattern (emblem) as identification information drawn on the periphery of each right reel into the left. The figure shown in the left-hand side of drawing 3 is a pattern number, and 21 patterns (emblem) of 0-20 are given to the periphery of each reel. (a) of drawing 3 shows the pattern drawn on the periphery of left reel 6L (refer to drawing 2), (b) is drawing having shown the pattern drawn on the periphery of inside reel

6C, and (c) is drawing having shown the pattern drawn on the periphery of right reel 6R. If the display result at the time of a halt of the adjustable display 70 serves as "AAA" on the effective line (hit line) according to the number of bets, while a big bonus game will be started, 15 coin pays out. If set to "BBB" on an effective effective line, while a bonus game will be started on the other hand, 15 coin pays out. If it is furthermore set to "CCC" or "DDD" on an effective line, the combination of the pattern of the role of small will be organized and 15 coin will pay out. If set to "EEE" on an effective line, the role of small will be materialized and eight coin will pay out. If both a left pattern and an inside pattern are set to "F" on an effective line, the role of small will be materialized and six coin will pay out. Moreover, if only a left pattern is set to "F" on an effective line, the role of small will be materialized and three coin will pay out.

[0019] Furthermore, adjustable initiation of the adjustable display 70 is again carried out only by performing start actuation, without performing the coin charge etc. so that a re-game may materialize and mention later in the usual game which is not among a big bonus game or a bonus game, if three "G", i.e., "JAC(s)", gathers on a hit line. Moreover, if this "G" gathers on [three] an effective line in a big bonus game, initiation of a bonus game will be performed. Moreover, if this "G" hits and it gathers on [three] a line in a bonus game, it will become winning a prize in a bonus game, and 15 coin will pay out. In addition, the effective hit line which winning a prize generates in a bonus game is only the horizontal single tier of the middle in an adjustable display. Moreover, when the combination of the pattern which the coin mentioned above when two or more effective lines according to the number of bets existed pays out is simultaneously organized on two or more effective lines, it is a principle that the coin equivalent to the sum total number of sheets of the coin number of sheets given by the combination of the pattern on each effective line is given. However, since the upper limit of the coin given in one game is determined as 15 sheets, in exceeding 15 sheets, the coin after the 16th sheet serves as an invalid.

[0020] Drawing 4 is the side elevation of each reels 6L, 6C, and 6R. the circumferencial direction [periphery / of each reels 6L, 6C, and 6R] centering

on the center of rotation (it is equivalent to the axial center of the driving shaft of the reel drive motors 7L, 7C, and 7R) of each reels 6L, 6C, and 6R -- predetermined -- it is divided into the field of 21 for every central angle, and each pattern shown in drawing 3 considering each field as range of one pattern is drawn on each of that field.

[0021] The figure of 0-20 shown in drawing 4 is equivalent to the pattern numbers 0-20 of each pattern shown in drawing 3 , and each pattern is drawn considering the location shown with the broken line of drawing 4 as the pin center,large location. The radii shown in the left-hand side of drawing 4 are the viewing areas of each adjustable displays 5L, 5C, and 5R, and three patterns are displayed on a lengthwise direction by each adjustable displays 5L, 5C, and 5R so that clearly from drawing 4 .

[0022] reel criteria location 6La, 6calcium, and 6Ra which consist of a notch, a projection, etc. form in the predetermined location of the circumferencial direction of each reels 6L, 6C, and 6R respectively -- having -- **** -- the reel criteria location -- an inner circumference side -- each -- each reel location sensors 8L, 8C, and 8R for detecting reel criteria location 6La, 6calcium, and 6Ra are formed. the case where Reels 6L, 6C, and 6R rotate each reel location sensors 8L, 8C, and 8R -- each -- reel criteria location 6La, 6calcium, and 6Ra pass -- ** -- it is alike and they are detected.

[0023] Drawing 5 is the block diagram showing the control circuit used for the slot machine of this invention.

[0024] A control circuit contains the control section (a microcomputer is included) 45 as a control center. A control section 45 has the function which controls actuation of the slot machine 1 which is described below. It consists of LSI of a number chip and, as for the control section 45, ROM47 which stores the program of CPU46 and CPU46 of operation which can perform control action in a predetermined procedure, and RAM48 which can do the writing and read-out of required data are contained in it. Furthermore, I/O Port 49 for taking the consistency of the signal of CPU46 and an external circuit, the initial reset circuit 51 which gives a reset pulse to a power up etc. at CPU46, the clock

generation circuit 52 which gives a clock signal to CPU46, the pulse frequency divider (interrupt pulse generating circuit) 53 which carries out dividing of the clock signal from the clock generation circuit 52, and gives an interrupt pulse periodically to CPU46, and the address decoding circuit 54 which decodes the address data from CPU46 are included.

[0025] CPU46 becomes possible [performing actuation of an interrupt control routine according to the interrupt pulse given periodically from the pulse frequency divider 53]. Moreover, the address decoding circuit 54 decodes the address data from CPU46, and gives a chip select signal to ROM47, RAM48, I/O Port 49, and a sound generator 50, respectively.

[0026] In this example, when rewriting of that content, i.e., the need, produces ROM47, the programmable ROM 47 is used so that the program for CPU46 stored in it can be changed. And according to the program stored in ROM47, CPU46 answers the input of each control signal described below, and gives a control signal to a reel drive motor, various display lamps, etc. which were mentioned above.

[0027] First, when a door switch 44 is operated by the manager of an amusement center etc., the manipulate signal is given to I/O Port 49 through the switch sensor circuit 55. When the key stroke of the key switch 43 is carried out by the predetermined key, the manipulate signal is inputted into I/O Port 49 through the switch sensor circuit 55. When the change in game mode and probability setting-out mode is performed by this key switch and it has become probability setting-out mode, input setting out of the probability of a hit is carried out so that it may mention later based on the detection output of a door switch 44. When a reset switch 4 is operated by the predetermined key, the manipulate signal is inputted into I/O Port 49 through the switch sensor circuit 55. Press actuation of the game change-over carbon button 16 is detected by the game circuit changing switch 17, and the detecting signal is inputted into I/O Port 49 through the switch sensor circuit 55. Actuation of the credit manual operation button 14 is detected by the credit switch 15, and the detection output is inputted into I/O Port 49 through the switch sensor circuit 55. Press actuation of

the start lever 12 is detected by the start switch 13, and the detection output is inputted into I/O Port 49 through the switch sensor circuit 55. Each detecting signal of left stop button 9L, inside stop button 9C, and right stop button 9R is detected by left stop switch 10L, inside stop switch 10C, and right stop switch 10R, and each detecting signal is inputted into I/O Port 49 through the switch sensor circuit 55. The coin thrown in from the coin slot 18 is detected by the charge coin sensor 36, and the detection output is inputted into I/O Port 49 through the switch sensor circuit 55. When coin pays out by the coin expenditure motor 38 (refer to drawing 2), the expenditure coin pays out and it is detected by the coin sensor 39, and the detection output is inputted into I/O Port 49 through the switch sensor circuit 55. If the surplus coin reservoir tank 41 becomes full in reservoir coin, that will be detected by the full sensor 42 and the detection output will be inputted into I/O Port 49 through the switch sensor circuit 55. By left reel 6L, inside reel 6C, and right reel 6R rotating, if a value (the notch etc. is formed) is detected at least for the criteria of each reel from left reel location sensor 8L, inside reel location sensor 8C, and right reel location sensor 8R, each detecting signal will be inputted into I/O Port 49 through the switch sensor circuit 55.

[0028] A control section 45 outputs a control signal to the various following devices. First, the control signal for reel actuation (step signal for stepping motors) is outputted to left reel drive-motor 7L, inside reel drive-motor 7C, and right reel drive-motor 7R through the motor circuit 56, respectively. The control signal for coin expenditure is outputted to the coin expenditure motor 38 through the motor circuit 57. The control signal for solenoid excitation is outputted to the passage change-over solenoid 33 through the solenoid circuit 58. The control signal for a display is outputted to the count indicator 25 of a game, the credit indicator 26, and the expenditure numeral machine 27 through the LED circuit 59, respectively. The signal for ramp control is outputted to game effectiveness lamp 24, charge indicator lamp 19, effective line display lamp 21, 22, and 23, left actuation effective lamp 11L, inside actuation effective lamp 11C, and right actuation effective lamp 11R, the game exaggerated lamp 20, and the re-game

display lamp 64 through the lamp circuit 60, respectively. The control signal for sound generating is outputted to a loudspeaker 28 through a sound generator 50 and amplifier 61.

[0029] The card processor control section 80 prepared in the card processor 76 is electrically connected to the control section 45. The coin loan mode signal for specifying whether it is in the condition which can lend out coin from I/O Port 49 through the information output circuit 67 at the card processor control section 80 is outputted. In the card processor control section 80, in response to the signal, in being the mode which can be lent out, it switches on the light or displays [flash] the loan good drop 70. If a game person does press actuation of the loan carbon button 71, the manipulate signal will be inputted into the card processor control section 80 from the loan switch 72, and a coin loan command signal will be inputted into I/O Port 49 through the information input circuit 66 from the card processor control section 80. In a control section 45, control which outputs the control signal for paying out the coin of the number of predetermined leaves to the coin expenditure motor 38 in response to the signal, and lends out the coin of the number of predetermined leaves is performed. If the coin of the number of predetermined leaves is lent out, the coin loan signal of the purport that the coin of the number of predetermined leaves was lent out from I/O Port 49 to the card processor control section 80 through the information output circuit 67 will be outputted. If a common card is inserted in common card insertion and an exhaust port 79 and is read by the card reader writer 78, the control signal for displaying valuable worth (balance) of game person possession specified based on the reading data will be outputted to the balance drop 75 from the card processor control section 80. Furthermore, a card processor connection signal is inputted into I/O Port 49 through the information input circuit 66 from the card processor control section 80 a condition [the card processor control section 80 and the control section 45 being connected electrically]. In a control section 45, a game is activity-ized a condition [there being an input of this card processor connection signal]. That is, when this card processor connection signal is not inputted, even if it is made

not to carry out actuation control of each reel drive motors 7L, 7C, and 7R or press actuation of the loan carbon button 71 is carried out, it carries out making it not lend out coin etc., and a game is formed into un-activity. In addition, a predetermined direct current is supplied to the various devices and control circuit which were mentioned above from a power circuit 62. Moreover, even if it is constituted by RAM48 so that the current for storage maintenance may be supplied from a backup power supply 63, and supply of the current from a power circuit 62 is no longer performed by interruption to service etc., it is constituted so that the predetermined period storage of the probability set point or the game condition can be carried out.

[0030] Drawing 6 thru/or drawing 9 , drawing 12 , or drawing 17 is a flow chart for explaining actuation of the control circuit shown in drawing 5 .

[0031] Drawing 6 (a) is a processing program performed to a power up. Powering on of a slot machine can consider the case where it is carried out at the time of operating initiation of an amusement center, and the case where it is carried out during business like [when a power source once falls by interruption to service etc. during the business of an amusement center and interruption to service is restored again]. In drawing 6 , decision of being ON is first performed for a reset switch in step S(only henceforth S) 1. This reset switch 4 is used for or or selection setting out of whether to set so that a function may not be carried out set so that game over (close) may be functioned, and if the reset switch 4 is turned on, it will be set up so that it may be set as the mode of game exaggerated nothing and game over (close) may not function from S3. On the other hand, if the reset switch 4 is turned off, it will be set up so that it may be set to the mode of game exaggerated ** by S2 and game over (close) may function. In addition, you may make it set up selection of close existence with the switch of dedication. Next, it progresses to S4 and decision whether the key switch is turned on is performed. When a key switch is OFF, it progresses to S5, when a key switch 43 is ON, it is in probability setting-out mode, when a key switch 43 is OFF, it is in the condition set as game mode, decision whether RAM is normal is performed, and in being normal, a slot machine returns to the

game condition at the time of power-source cutoff. That is, since RAM48 shown in drawing 4 is backed up by the backup power supply 63 in the time of interruption to service etc., this RAM48 has memorized the step of the program which was being performed among the steps of S33 thru/or S200 mentioned later at the power-source falls event at the interruption-to-service generating event etc., and when decision of YES is made by S5, program control returns to the step at the time of that memorized power-source cutoff.

[0032] While decision of NO is made by S5, progressing to S6 in the time of the overrun of a program etc. on the other hand and initializing RAM, the set point of a winning-a-prize probability is initialized. Initialization of the winning-a-prize probability by these S6 is initialized so that it may become the set point "3." It is prepared six steps from "1" to "6" which is the lowest probability and which is the highest probability, and the set point is initialized by initialization by these S6 by "3" which is an almost average probability so that it may mention later. Consequently, since it is set as an almost average probability when a slot machine is initialized by program overrun etc., there is an advantage which can prevent an extreme change from which a winning-a-prize probability changes to the extremely high set point, or changes to the extremely low set point bordering on initialization which considered the program overrun etc. as the cause.

[0033] On the other hand, when the key switch 43 is operated by ON, i.e., probability setting-out mode, it progresses to S7, and it is controlled so that it changes to a charge coin passage return-side and charge coin is returned. Next, it progresses to S8, decision whether there was any start actuation is performed, and when there is nothing, it progresses to S10. in S10, decision whether there was any door-switch actuation should do -- when there is nothing, the set point of the probability in this time is displayed with the expenditure numeral vessel 27 by S13, and it returns to S8. In addition, the set point drop of dedication may be formed.

[0034] It is in the middle of this patrol of S8 thru/or S13, and if the manager and official in charge of an amusement center operate a door switch 44 (refer to

drawing 1) once, decision of YES will be made by S10, it will progress to S11, and "1" stepping of the set point of a probability will be carried out. Next, it progresses to S12A and decision whether the set point in this time is "7" is made. Since it is determined as "6", the upper limit of the set point of this probability progresses to S12B, when the set point is set to "7", and processing which sets the set point to "1" again is performed, and it progresses to S13. On the other hand, when the set point is not "7", it progresses to S13 directly, and the display of the set point in this time is performed. Looking at the display of the set point of the probability by S13, the official in charge of an amusement center operates a door switch 44 so that it may become the desired set point. And if it becomes the desired set point, a key switch 43 will be changed to OFF, it will change to game mode, and decision of YES will be made by S8 by operating the start lever 12 (referring to drawing 1) next, and turning ON the start switch 13. Consequently, since the key switch 43 is already changed to OFF, it progresses to S14, and clear processing of initialization of RAM, decision of the set point of a probability, and a setting-out display is made. Next, the number of the accumulation charge and the number of accumulation expenditure of coin are set as "100" and "50" by S14A as initial value, respectively. Thereby, the rate of standard expenditure of the role of small at the time of a game usually becomes 50 / 100x100% = 50%. Next, it shifts to game start processing.

[0035] Drawing 6 (b) is a flow chart which shows the interrupt program of random rolling-counters-forward processing. The interrupt program shown in this drawing 6 (b) is performed based on the pulse signal inputted periodically from the pulse frequency divider 53 mentioned above, and is performed by a unit of 1 time every 4msec(s). Processing to which predetermined updates several N ****s of the values R of a random counter is first performed by S15. Next, it progresses to S16, decision whether it became more than the maximum as which the value R of a random counter was determined beforehand is performed, when having not yet become more than maximum, it progresses to S18, and decision whether one game was completed is performed. Although it

is at the that adjustable display's halt event and ends, when the display result coin at the time of a halt of an adjustable display does not pay out at all, when coin pays out, one game ends this one game in the phase which expenditure of coin ended. When one game is not completed, an interrupt program is completed as it is, and it becomes next interrupt waiting.

[0036] On the other hand, when the value R of a random counter has turned into more than maximum, it progresses to S17, and after processing to which only the maximum carries out renewal of subtraction of the value R of a random counter is performed, it progresses to S18. Next, when this interrupt program is performed to the timing which one game ends, decision of YES is made by S18 and it progresses to S19, and based on the value R of a random counter, processing which changes the value N which carries out renewal of addition is performed in S15. these the addition of several -- two or more kinds of prime factors to which N is set beforehand -- and one is chosen from the prime factors from which the quotient at the time of **(ing) said maximum with that prime factor does not become an integer, and S19 changes. By setting up in this way, the number N of addition will be in the condition that the value R of a random counter can take all numeric values uniformly. Moreover, whenever one game is completed, in order to change the number N of addition into other prime factors by S19, the value R of a random counter turns into a random value, and when determining that it is winning a prize later mentioned based on the value of this random counter, there is an advantage which can make a random decision.

[0037] Drawing 7 (a) is the flow chart of the interruption program which shows error-checking processing. Decision whether the card processor 76 is first connected by S20A is made, if the card processing machine connection signal is not inputted, it progresses to S20B, and the error code "CC" showing an error to that effect is displayed on the expenditure drop 27. If the card processor 76 is connected, decision whether it is in the coin piece condition that the coin which should progress to S20C and should be paid out ran short will be made. When it is judged that it is not in a coin piece condition, it progresses to S21, and decision whether charge coin was got blocked is performed. When charge coin

is not choked up, progress to S22, and decision whether charge coin became full within the surplus coin reservoir tank 41 (refer to drawing 2) should do. When you are not full, progress to S23, and decision whether the coin paid out of the coin hopper 37 (refer to drawing 2) was got blocked should do. It completes an interrupt program, in making decision whether it progresses to S24 and is under error, when not choked up and not being under error.

[0038] And the number of expenditure schedules which is number of sheets of the coin which should be paid out as a result of termination of the number of expenditure which is number of sheets of the paid-out coin of one game is not reached. And the coin expenditure motor 38 is judged to be a coin piece, when expenditure of coin is not detected in fixed time amount in spite of under a revolution, decision of YES is made by S20C, and an error code "HE" is displayed by S25 with the expenditure numeral vessel 27 (refer to drawing 1). On the other hand, the thrown-in coin is got blocked within the coin taking-in trajectory 35, when the charge coin sensor 36 (refer to drawing 2) changes into the condition of having detected coin continuously beyond fixed time amount, decision of YES is made by S22 and an error code "CE" is displayed by S26. Moreover, if charge coin becomes full and the full sensor 42 (refer to drawing 2) carries out full detection into the surplus coin reservoir tank 41, decision of YES will be made by S22, it will progress to S27, and an error code "CO" will be displayed with the expenditure numeral vessel 27. The coin paid out of the coin hopper 37 is got blocked, when the expenditure coin sensor 39 (refer to drawing 2) changes into the condition of having detected coin continuously beyond fixed time amount, decision of YES is made by S23, it progresses to S28, and an error code "HJ" is displayed with the expenditure numeral vessel 27. When a motor error arises as a result of the decision of S85H mentioned later, decision of YES is made by S23A and it progresses to S28A, and an error code "EE" is displayed with the expenditure numeral vessel 27. Furthermore, after the judgment of the purport which is an error is made by said S20 thru/or S23, during a period until the error code is cleared by S32 mentioned later, decision of YES is made by S24, it progresses to S29, and the display of the error code

currently shown by either of said S25 thru/or S28A is continued succeedingly. That is, the display of an error code is succeedingly continued until an error code is cleared by S32 which front frame 1B which the display of the error code by S29 has in the Kaisei condition after the cause of an error is removed by the official in charge of an amusement center is closed, and is mentioned later.

[0039] After S25, S26, S27, S28, S28A, or processing of S29 is made, it progresses to S30, the game of a slot machine is interrupted, and processing which generates an error sound from a loudspeaker 28 is performed.

[0040] If the official in charge of an amusement center hears that the error sound is emitted from a loudspeaker 28, the official in charge of the amusement center does Kaisei of the front frame 1B so that he may remove the cause of an error of a slot machine, the class of cause of an error further generated from the error code currently displayed with the expenditure numeral vessel 27 identifies, and the cause of an error which did the activity according to the class of cause of an error, and has generated will remove. And after the activity is completed, the official in charge of an amusement center closes front frame 1B. Then, a door switch 44 detects that front frame 1B was closed, and decision of YES is made by S31 according to it. Consequently, control progresses to S32, the error code displayed with the expenditure numeral vessel 27 is cleared, an error sound is stopped, and a game is resumed from the game condition at the time of interruption generating. In addition, a detection output may be made to draw from a door switch 44, and YES may be made to judge by S31 by carrying out press actuation of door SUTCHI 44 with a finger etc. rather than closing front material 1B actually.

[0041] Drawing 7 (b) and drawing 8 are flow charts which show game start processing. Processing which controls the passage change-over solenoid 33 (refer to drawing 2) by S33, and switches the passage of charge coin to a taking-in side by it is performed, it progresses to S34 and decision whether there was any game change-over actuation is performed. When there is no game change-over actuation, it progresses to S40, but when a game person does press actuation of the game change carbon button 16, it progresses to

S35, and when having not come to carry out decision whether it is current credit game mode now, processing made into credit game mode by S36 is performed. On the other hand, when it is already credit game mode, it progresses to S37, and processing made into coin game mode is performed, it progresses to S38, and decision whether a credit counter is "0" is performed. This credit counter is for carrying out counting of the coin number of sheets which the number of sheets and game person of the coin given as a prize at the time of a credit game supplied, and memorizing it, and while renewal of "1" every addition is carried out by S60 and S179 which are mentioned later, renewal of "1" every subtraction is carried out by the below-mentioned S39 and S56. When this credit counter is "0", it progresses to S40, but while progressing S39 in more than "1" and paying out one coin, the processing which carries out renewal of "1" subtraction of the credit counter is made, and it returns to S38. The coin of only the number of sheets which performs this processing of S39 repeatedly until a credit counter is set to "0", and is equivalent to the counted value of a credit counter pays out, and is controlled. That is, since it is necessary to pay out the coin of the number of sheets equivalent to the value of the credit counter by which addition storage is carried out at the time of that credit game to a game person side when a game person does change actuation in the condition of being credit game mode and it is made coin game mode, it controls by paying out by these S39. On the other hand, if a game person does press actuation of the game change carbon button in the condition of being coin game mode at present, it will progress to S36 and will be set as credit game mode.

[0042] Next, it progresses to S40, decision whether there was any start actuation is made, and when press actuation of the start lever 12 (refer to drawing 1) is not yet carried out, it progresses to S41A. In S41A, when decision whether there was any coin loan command signal is made and there is nothing, it progresses to S41H. On the other hand, if a game person does press actuation of the loan carbon button 71, the manipulate signal will be inputted into the card processor control section 80 from the loan switch 72, and a coin loan command signal will be inputted into the control section 45 of a slot

machine 1 from the card processor control section 80. Then, control sets the number of loans to "50" while it progresses to S41B and outputs a coin loan signal to the card processor control section 80 from a control section 45. On the other hand, in the card processor control section 80, 1000 yen is reduced in response to this coin loan signal from valuable worth (balance) of game person possession specified by the recording information of the common card inserted. In addition, although the loan unit of coin was made into 1000 yen, whenever it makes a loan unit into 100 yen and pays it out five sheets, it is made to reduce by a unit of 100 yen, and you may make it lend out the coin of **** of 1000 yen by performing this processing 10 times in this example. If it does in this way, even if a less than 1000 yen fraction is in the balance of a common card, all balance **** can be lent out.

[0043] Next, it progresses to S41C, and when decision whether it is credit game mode is made and it has not become credit game mode, while S41F perform control which pays out one coin, processing which subtracts "1" from the number of loans is performed, and it progresses to S41G. If it has switched to the credit game condition that the game person did press actuation of the credit manual operation button 14, and mentioned the slot machine 1 above on the other hand, decision of YES is made by S41C, it will progress to S41D and decision whether the credit counter is "50" will be made. A credit counter is for carrying out counting of the valuable worth (coin number of sheets etc.) of game person possession currently stored beforehand, in order to perform a credit game, it is added by S41D mentioned later and S60 "1" every, and S56 subtracts "1" every. And since valuable worth of game person possession cannot be stored in a credit counter any more when the credit counter is "50" which is the upper limit, it progresses to S41F and one coin expenditure control is performed. When the credit counter is not "50" which is the upper limit, while progressing to S41E and adding "1" to a credit counter on the other hand, "1" subtraction processing of the number of loans is carried out.

[0044] in S41G, decision whether the number of loans is "0" should do -- the case where it is not "0" -- S41C -- return -- again -- expenditure of coin -- or

addition processing to a credit counter is performed. By repeating this processing, if the number of loans is set to "0", it will progress to S41H.

[0045] Next, in S41H, decision whether the number counter of the charge is "3" is performed. With this number counter of the charge it is for setting up the number of bets which carries out counting of the count of actuation to which the game person did press actuation of the number of sheets of the coin which it faced performing one game and the game person threw in from the coin slot 18, or the credit manual operation button 14 in a credit game, and is risked on the game result in one game. Although renewal of "1" every addition is carried out by S57 mentioned later and not being illustrated, in relation to S33, it is cleared at the time of the next game initiation. According to the counted value of this number counter of the charge, input setting out of the number of bets is carried out, when the counted value of that number of bets, i.e., the number counter of the charge, is "1", the effective line (hit line) which becomes effective is set to one, when counted value is "2", it is set to three, and when counted value is "3", it is set to five. The upper limit of the counted value of this number counter of the charge "it is set as 3]. When the counted value of the number counter of the charge is not "3" which is the upper limit by S41, it progresses to S42, and decision whether the bonus game flag is set is performed. This bonus game flag is cleared by S188, when it changes into the condition that a bonus game (regular bonus game) is actually started based on the display result at the time of a halt of an adjustable indicating equipment, and it is set by S162 and S169 and that bonus game is completed. And although it progresses to S47 when the bonus game flag is not set, when set, it progresses to S43, decision whether the number counter of the charge is "0" is performed, and in being "0", it progresses to S47, and, in more than "1", progresses S44. That is, in the case of a bonus game, since the effective line of the combination of an adjustable display becomes effective [one] as mentioned above, it controls not to become the value to which only the game of 1 bet is accepted, therefore the number counter of the charge exceeds "1." In S44, when decision whether it is credit game mode is performed and it has not become credit game mode, after processing

which returns the coin which progressed to S46, switched to the charge coin passage return-side, and was thrown in after that is performed, it progresses to S40. Processing which returns the coin thrown in by progressing to S45 on the other hand when it is credit game mode, and progressing to S46 since decision whether the credit counter is "50" which is already the upper limit is performed, and renewal of addition of a credit counter cannot be performed any more when it is "50" is performed.

[0046] Processing which progresses to S60 when decision of whether to be "3" whose number counter of the charge it progresses to S48 when decision of whether there was any coin charge in S47 is performed and it is, and is already the upper limit is performed and it has already become "3", and carries out "1" addition at a credit counter is performed, and it returns to S40. On the other hand, when the number counter of the charge is not "3", it progresses to S49, decision whether the bonus game flag is set is performed, and since it progresses to S57 and allowances are still in the counted value of the number counter of the charge when the bonus game flag is not set, processing which adds "1" to the counted value is performed. When the bonus game flag is set, it progresses to S50, and decision whether the number counter of the charge is "0" is performed. Since the upper limit of the number counter of the charge is set to "1" as mentioned above in the case of the bonus game, when the number counter of the charge is "1", it progresses to S60, and processing adding "1" which is the number of sheets of the coin fed into the credit counter is performed. Next, processing which calls and stores the value R of the random counter by which renewal of addition is carried out according to the random rolling-counters-forward processing which progressed to S56 and was mentioned above is performed. When the judgment of a purport to which start actuation was performed by said S40 is made, it may be made to perform storing of this random value R. Next, it progresses to S59A, and processing which sets the number of expenditure schedules and the number of expenditure to "0" is performed, and it progresses to S59B. The number of expenditure schedules is number of sheets of the coin paid out to a game person according

to the class of the winning a prize when winning a prize is determined based on the display result at the time of a halt of an adjustable display, and the number of expenditure is number of sheets of the coin actually paid out based on winning a prize.

[0047] In S59B, the effective line according to the coin number of sheets supplied when decision whether the number counter of the charge is "0" was performed, and it is "0", and progressing to S59C and performing one last game is turned on, and it returns to S40. If it, on the other hand, faces performing this one game and coin is thrown in, since the number counter of the charge is not "0", it will progress to S59D, and the display of the effective line according to the number counter of the charge will be performed, and it will return to S40. Only the effective line display lamp 21 with which the display of this effective line displays width 1 central train when the value of the number counter of the charge is "1" is turned on. The effective line display lamps 21 and 22 which the effective line of width 3 train displays when the number counter of the charge is "2" are turned on. When the number counter of the charge is "3", a burning indication of all the effective line display lamps 21-23 that display five effective lines of two trains on width 3 train and the slanting diagonal line is given.

[0048] Next, when it is judged that there is no charge of coin by S47, it progresses to S51, decision whether a credit counter is "0" is performed, in not being "0", it progresses to S52, decision whether there was any credit actuation is performed, and when there is no credit actuation, it progresses to S59B. On the other hand, it progresses to S59B directly, without performing decision by S52, when a credit counter is "0." Since this cannot perform the game which uses the counted value of the credit counter even if a game person does press actuation of the credit manual operation button 14 and performs credit actuation how much, when a credit counter is "0", it is because it becomes making [itself]-judgment whether there was any credit actuation futility. Next, when there is credit actuation, it progresses to S53, and when decision whether the number counter of the charge is "3" is performed and it has become "3" which is already the upper limit, credit actuation is disregarded and it progresses to

S59B. On the other hand, when it is not "3", it progresses to S54, decision whether the bonus game flag is set is performed, when the bonus game flag is set, it progresses to S55, and when decision whether the number counter of the charge is "0" is performed and the number counter of the charge has become "1" which is a upper limit at the time of a bonus game, credit actuation is disregarded and it progresses to S59B. On the other hand, when the number counter of the charge is "0", or when the bonus game flag is not set, after progressing to S56 and carrying out renewal of "1" subtraction of the credit counter, it progresses to S57, and processing which adds "1" to the number counter of the charge is performed.

[0049] Whenever a game person throws in coin from a coin slot 18 in order to carry out input setting out of the number of bets risked on the game result in one game, as explained above, the random value R of a random counter is read by S58. And when a game person throws only one coin into a coin slot 18 and starts one game, the random value R read based on the one charge coin is stored, and the content of value grant at the time of an adjustable halt of an adjustable display is determined in advance using the random value R. On the other hand, if a game person throws in two-sheet coin from a coin slot 18, it is updated by the random value R which the random value R read based on the charge of coin of the 1st sheet was eliminated, and was read based on the charge of coin of the 2nd sheet, and the updated random value R is stored. And if a game person does start actuation, the content of value grant at the time of an adjustable halt of an adjustable display will be determined in advance using the stored random value R. Furthermore, if a game person throws in three coin from a coin slot 18 it is updated by the random value R from which the random value R read based on the charge of coin of the 1st sheet was read based on the charge of coin of the 2nd sheet. It is updated by the random value R from which the updated random value R was read based on the charge of coin of the 3rd more sheet, the random value R updated eventually is stored, and it is used for the prior decision of the content of value grant at the time of an adjustable halt of an adjustable display. In addition, start actuation may be made to extract

the random value R. On the other hand, whenever it carries out press actuation of the credit manual operation button 14 so that a game person may do the setting-out input of the number of bets at the time of a credit game, within the limit of 3 times, the random value R of a random counter is read by S58, and it is stored. If the random value R is read twice, storing of this random value R as well as the above-mentioned If the random value R read to the 1st time is updated and stored in the random value R read to the 2nd time and the random value R is read 3 times, the random value R read to the 2nd time will be updated by the random value R read to the 3rd time of the, and the last random value R will be stored.

[0050] Next, although decision of YES is made by S40, it progresses to S61 and decision whether the number counter of the charge is "0" is made, and it will progress to S41 in being "0" if a game person does press actuation of the start lever 12, in more than "1", it progresses S62, the passage charge-over solenoid 33 is controlled, and it shifts to a charge and subsequent reel roll controls at a charge coin passage return-side. The coin thrown in after it will be returned in the coin reservoir pan 30 as a result of this processing of S62.

[0051] Drawing 9 and drawing 12 are flow charts which show the program of reel revolution processing. Decision whether 1 game timer is first completed from S63 is performed. This 1 game timer is for clocking the time amount (for example, 4.1 seconds) which must pass at worst after one game is started until it ends, and it is set by S65. In addition, the time amount set to 1 game timer is changed according to the number of bets, and when it is 2 bets, you may make it the number of bets risk one, and set time amount shorter than the case of 3 bets. When 1 game timer is not completed, it progresses to S64, and the purport which the waiting sound for timer termination is generated from a loudspeaker 28, and 1 game timer has not ended is reported to a game person. On the other hand, if 1 game timer is completed, it will progress to S65, 1 game timer will newly be set, an actuation invalid timer will be set, and a revolution of all reels will be started. As mentioned above, even if this actuation invalid timer operates stop buttons 9L, 9C, and 9R, it is a timer for clocking the time amount

which repeals that actuation.

[0052] Next, the processing which performs a predetermined operation using the random value R stored by progressing to S66 is made. The predetermined operation is an operation which adds a predetermined value, subtracts, takes advantaging, **, or squares or cubes the random value R, or computes an answer by assigning the random value R to a predetermined function to the random value R. S67 [next,] -- progressing -- the result of an operation -- the charge -- processing in comparison with the success-in-an-election allowed value according to a number, the set point, a probability fluctuation counter, and the role judging mode of small is performed.

[0053] This success-in-an-election allowed value consists of four kinds, the big bonus (game BB) success-in-an-election allowed value, a regular bonus game (RB) success-in-an-election allowed value, a re-game success-in-an-election allowed value, and the role success-in-an-election allowed value of small, as shown in drawing 10 (c), (d), and drawing 11 . Each of this success-in-an-election allowed value is memorized by ROM47 in the form of a table. As for the success-in-an-election allowed value shown in drawing 10 (c), the role judging mode of small shows [the probability fluctuation counter / the probability set point] the case where it is "4" by "0" by "it is usually at the time" by the three-sheet bet. It is used in order to be set as "being usually at the time", to be set up at "the time of a high probability" when lower than a certified value and to carry out feedback control of the role probability of occurrence of small according to a certified value as compared with the certified value as which the value grant situation to the game person according [this role judging mode of small] to a slot machine 1 was determined beforehand, when higher than that certified value. Moreover, at "the time of a big bonus", it is controlled so that the role of small occurs in a high probability. A probability fluctuation counter is for memorizing how many times the probability of occurrence of a big bonus game is raised, and it is set to "2" by S195N mentioned later, and is set to "1" by S195P. And in not raising a probability, it is in the condition that "0" was memorized. The "probability set point" is a value set up according to actuation

of the key switch mentioned above (S9 - S13 reference).

[0054] The operation value according to S66 as shown in drawing 10 (c) is the big bonus success-in-an-election allowed value b0. In the following, it corresponds at big bonus game success in an election. b0 It is the regular bonus game success-in-an-election allowed value b1 above. In the following, it corresponds at a regular bonus game. b1 It is the re-game success-in-an-election allowed value b2 above. In the following, it corresponds at re-game success in an election. b2 It is the role success-in-an-election allowed value b3 of 15-sheet small above. It corresponds to the role success in an election of small which pays out 15 coin in the following. b3 It is the role success-in-an-election allowed value b4 of eight-sheet small above. It corresponds to the role success in an election of small which pays out eight coin in the following. b4 It is the role success-in-an-election allowed value b5 of six-sheet small above. It corresponds to the role success in an election of small which pays out six coin in the following, and is b5. It is the role success-in-an-election allowed value b6 of three-sheet small above. It corresponds to the role success in an election of small which pays out three coin in the following, and is b6. In the above case, it corresponds at a blank. In addition, A34, B34, C31, D31, E31, F31, and G11 which are shown in drawing 10 (c) are the value shown in drawing 10 (a) and (b). Moreover, RMAX It is the upper limit which the result of an operation using the random value R can take.

[0055] In the figures 1-6 shown in the train of the leftmost of drawing 10 (a), the figure of 1, 2, and 3 which showed the probability set point and was shown in the top line shows, the charge number of sheets, i.e., number of bets, of coin, BB shows a big bonus game and RB shows a regular bonus game. Moreover, "it is usually at the time" shows the time of the probability of occurrence of a big bonus game being a normal state, and the case where the probability of occurrence of a big bonus game improves is shown at "the time of fluctuation." As for "usual", the "high probability", and "BB" which 1, 2, and 3 which were shown in the line of the top of drawing 10 (b) showed, the charge number of sheets, i.e., number of bets, of coin, and were shown in the line under it, the

role judging mode of small usually shows the time, a high probability, or the time of a big bonus.

[0056] In the case of drawing 10 (c), it is a three-sheet bet, and the role judging mode of small is [the value of a probability fluctuation counter] usually "0" in the time. The numeric value the number of the charge was indicated to be by setting out "4" of drawing 10 (a) by the column to which the probability of occurrence of a big bonus game corresponds to "it is usually at the time" "3" since it was the case where probability setting out is "4", That is, A34 is used as a big bonus game success-in-an-election allowed value, and B34 is used as a regular bonus game success-in-an-election allowed value. Moreover, the numeric value the role judging mode of small was usually indicated to be for the number of the charge by "3" in drawing 10 (b) by the column at the time, that is G11 is used as F31 and a re-game success-in-an-election allowed value as a role success-in-an-election allowed value of small which pays out E31 and three coin as a role success-in-an-election allowed value of small which pays out the coin of 31 or 6 D as a role success-in-an-election allowed value of small which considers as the role success-in-an-election allowed value of small which pays out 15 coin, and pays out the coin of 31 or 8 C. In addition, the data shown in this drawing 10 (a) and (b) are memorized by ROM47 in the form of a table.

[0057] Drawing 10 (d) is a three-sheet bet, and it is the role judging mode of small at the "high probability time", and the value of a probability fluctuation counter is "0" and it shows the case where the probability set point is "4." In this case, if drawing 10 (a) and (b) are followed big bonus game success-in-an-election allowed value b0 =A34 -- regular -- bonus game success-in-an-election allowed value b1 =b0+B34 -- re--- role success-in-an-election allowed value of small b3 =b2+C32 and eight coin which pay out game success-in-an-election allowed value b2 =b1+G11 and 15 coin role success-in-an-election allowed value of small b4 =b3+D32 and six coin to pay out are paid out -- small -- role success-in-an-election allowed value b5 =b4+E32 and three coin are paid out -- small -- it is set to role success-in-an-election allowed value b6 =b5+F32.

[0058] Drawing 11 (a) shows the case where the probability set point is "4" by

the case where the value of "it is usually at the time" and a probability fluctuation counter is except "0" for a three-sheet bet and the role judging mode of small. In this case, if drawing 10 (a) and (b) are followed big bonus game success-in-an-election allowed value b0 =A44 -- regular -- bonus game success-in-an-election allowed value b1 =b0+B34 -- re--- role success-in-an-election allowed value of small b3 =b2+C31 and eight coin which pay out game success-in-an-election allowed value b2 =b1+G11 and 15 coin role success-in-an-election allowed value of small b4 =b3+D31 and six coin to pay out are paid out -- small -- role success-in-an-election allowed value b5 =b4+E31 and three coin are paid out -- small -- it is set to role success-in-an-election allowed value b6 =b5+F31.

[0059] Drawing 11 (b) is a three-sheet bet, it is the role judging mode of small at the "high probability time", and the case where the probability set point is "4" is shown by the case where the value of a probability fluctuation counter is except "0", and according to the table of drawing 10 (a) and (b), as shown in drawing 11 (b), each success-in-an-election allowed value is defined. Drawing 11 (c) is a three-sheet bet, it is the role judging mode of small at the "high probability time", and the case where it is [under / a big bonus game success-in-an-election flag set / or regular bonus game success-in-an-election flag] under set is shown. In this case, a big bonus game success-in-an-election allowed value and a regular bonus success-in-an-election allowed value do not exist. Drawing 11 (d) is a three-sheet bet, and the case where it is the role judging mode of small at the "big bonus time" is shown. In this case, a big bonus success-in-an-election allowed value and a re-game success-in-an-election allowed value do not exist. Moreover, as for the bonus game success-in-an-election allowed value in this case, the numeric value of the bottom line of drawing 10 (b) is used.

[0060] By constituting as mentioned above, in being the role judging mode of small at the "big bonus time", while the role probability of occurrence of small becomes [the role judging mode of small / the direction at "the time of a high probability"] high from "it is usually at the time", and the role probability of occurrence of small becomes high further, the bonus game probability of

occurrence also becomes high. Moreover, in the three-sheet bet, the big bonus game probability of occurrence, the bonus game probability of occurrence, the role probability of occurrence of small, and the re-game probability of occurrence become high rather than a two-sheet bet and a two-sheet bet from an one-sheet bet. Moreover, the probability of occurrence of a big bonus game becomes [the direction at the times other than "0"] high rather than the time of the value of a probability fluctuation counter being "0." In addition, in this example, when the value of the big bonus game probability of occurrence [not "0" but] of a probability fluctuation counter improves, and the number of the coin charge is three sheets, i.e., a three-sheet bet, it is limited, as shown in drawing 10 (a). setting the data shown in this drawing 10 (a) and (b) as a suitable value -- rate of the role expenditure of small, i.e., (each **** success-in-an-election probability x coin expenditure number of sheets), number of the /coin charge, x -- 100% can be made into a suitable value. For example, when the role judging mode of small is "being usually at the time", at the time at "the time of a high probability", it sets up like in 150 etc.% etc. 100% 50% at the time at "the time of a big bonus."

[0061] Next, it progresses to S68, decision whether the bonus game flag is set is performed, when the bonus game flag is not set, it progresses to S71, decision whether the big bonus game flag is set is performed, and when the big bonus game flag is not set, it progresses to S74. A reel revolution sound is generated from a loudspeaker 28, and then it progresses to S75, in S74, when decision whether the big bonus success-in-an-election flag or the bonus success-in-an-election flag is set is performed and it is already set, it progresses to S81, but when not set, it progresses to S76.

[0062] whether in S76, the comparison result by said S67 and the result of an operation using the random value R are contained in the big bonus success-in-an-election allowed value, and 0 <= result of an operation -- < -- b0 it is -- decision of a ****** should do -- when contained, it progresses to S77, and a big bonus success-in-an-election flag is set, and it progresses to S80. On the other hand, although the comparison result by said S67 and the result of an operation

using the random value R are not big bonus success-in-an-election allowed values, when it is contained in the bonus success-in-an-election allowed value (b0 <= result-of-an-operation <b1), decision of YES is made by S78 and it progresses to S79, and a bonus success-in-an-election flag is set, and it progresses to S80. In S80, the processing which carries out burning initiation of the game effectiveness lamp 24 (refer to drawing 1) is made, and then it progresses to S85. A big bonus or information of a purport which carried out bonus success in an election is performed by processing of S80. In addition, it replaces with burning of the game effectiveness lamp 24 by S80, and may be made to report the purport which formed the indicator of dedication and big bonus success in an election or bonus success in an election produced, and a predetermined sound is generated and you may make it report from a loudspeaker 28. Although it will be in the condition of recognizing the game person having been big-bonus-won or bonus elected as a result of this processing of S80 Since generating of a reach sound is not performed unless it wins [big-bonus-] or wins [bonus-] even if it will be in a reach condition during halt control of an adjustable display condition so that it may mention later, (S108-S110), It is prevention **** about the displeasure of the game person by information of a reach condition being performed in spite of not becoming a big bonus game or a bonus game.

[0063] When decision of NO is made by S78, it progresses to S81, decision whether the comparison result of S67 and the result of an operation using the random value R are contained in the re-game success-in-an-election allowed value is made, when not contained, it progresses to S83, but when contained (b1 <= result-of-an-operation <b2), it progresses to S82, and a re-game success-in-an-election flag is set, and it progresses to S85. It is controlled for adjustable initiation of the adjustable display to be automatically carried out by start actuation, and to play a re-game with the set of the re-game success-in-an-election flag by these S82, without throwing in coin so that it may mention later. Decision whether in S83, the comparison result of S67 and the result of an operation which used the random value R are contained in each **** success-

in-an-election allowed value should do. Although it progresses to S85 as it is when not contained, the success-in-an-election flag equivalent to the class of role of small contained by progressing to S84 when contained (b2 <= result-of-an-operation <b3, b4, b5, and b6) is set, and it progresses to S85.

[0064] Next, when the bonus game flag is set, decision of YES is made by S68, it progresses to S69 and decision whether the comparison result of S67 and the result of an operation of the random value R are contained in the JAC winning-a-prize allowed value is made. That is, I hear that the game condition of a slot machine is among a bonus game, and that decision of YES is made by S68 has it. When the display result at the time of an adjustable halt of the adjustable display in a bonus game became the halt pattern of "JAC", as it mentioned above Winning a prize in a bonus game occurred, the 15-sheet expenditure of coin was attained, and it has judged whether winning a prize in a bonus game is generated by S69. And although it progresses to S85 as it is when decision of NO is made by S69, when decision of YES is made, it progresses to S70, and a JAC winning-a-prize flag is set. Consequently, the control which generates winning a prize in a bonus game is made so that it may mention later.

[0065] On the other hand, when not a bonus game flag but the big bonus game flag is set, decision of YES is made by S71, it progresses to S72 and decision whether the comparison result by S67 and the result of an operation using the random value R are contained in the bonus game allowed value is made. When the display result at the time of an adjustable halt of an adjustable display becomes [the game condition of a slot machine] the combination of the halt pattern of "JAC" into a big bonus, the judgment of whether for the bonus game in a big bonus game to be started as mentioned above, therefore to generate the bonus game in a big bonus game by S72 is performed. And although it progresses to S83 when decision of NO is made by S72, when decision of YES is made, it progresses to S73, and a JAC winning-a-prize flag is set and it progresses to S85.

[0066] Next, in S85, decision whether the actuation invalid timer was completed is made, and it stands by until it ends. In addition, the time amount set to this

actuation invalid timer is the time amount (for example, 1 second) of the die length beyond time amount required to process S68-S84. And if an actuation invalid timer is completed, it will progress to S86, and a reel halt timer is set, and control which turns on the actuation effective lamps 11L, 11C, and 11R (refer to drawing 1) is performed.

[0067] Next, in S85A, decision whether the left reel criteria location was detected should do. When not detected, progress to S85C, and decision whether the inside reel criteria location was detected should do. When not detected, progress to S85E, and decision whether the right reel criteria location was detected should do. When not detected, it progresses to S85G, into the left, when decision whether the right criteria location detection flag is set is made and is not set, it progresses to S85H, decision whether the actuation invalid timer was completed is made, and when having not ended, it returns to S85A. It is in the middle of this S85A thru/or the patrol of the loop formation of S85H, and if left reel criteria location 6La is detected by left reel location sensor 8L, it will progress to S85B and a left criteria location detection flag will be set. Moreover, if inside reel criteria location 6calcium is detected by inside reel location sensor 8C, it will progress to S85D and an inside criteria location detection flag will be set. Moreover, if right reel criteria location 6Ra is detected by right reel location sensor 8R, it will progress to S85F and a right criteria location detection flag will be set. And into the left, if all right criteria location detection flags are set, decision of YES will be made by S85G and it will progress to S85I. Since it is assumed on the other hand that the reel is not rotating or the reel location sensor is out of order when the actuation invalid timer set by said S65 is completed without detecting a right reel criteria location into the left, it becomes a motor error and shifts to the actuation at the time of error generating.

[0068] In S85I, it stands by until an actuation invalid timer is completed, and it progresses to S86 in the ended phase, and stop actuation of a reel is validated. Thus, stop actuation is validated, after the criteria location of each reel is detected and an actuation invalid timer is completed. Moreover, it may be made

to progress in the phase which came to stand by until it comes to judge whether the delivery number of steps of the stepping motor turning around a reel became a predetermined value like S85J instead of S85I to S86. In S86, a reel halt timer is set and control which turns on the actuation effective lamps 11L, 11C, and 11R (refer to drawing 1) is performed. A reel halt timer is a timer for clocking predetermined time and stopping a reel automatically, when a game person does not operate stop buttons 9L-9R at all. Next, it progresses to S87, decision whether all reels stopped is made, when having not yet stopped, it progresses to S88, and decision whether the reel halt timer was completed is made. If it is judged that the reel halt timer was completed, it will progress to S95, and into the left, the halt flag of a right reel is set and it progresses to S96. on the other hand, when the reel halt timer is not completed, progress to S89, and decision whether there was any left reel halt actuation should do -- when there is nothing, decision whether there was any inside reel halt actuation by S91 should do -- when there is nothing, decision whether there was any right reel halt actuation by S93 should do -- when there is nothing, it progresses to S96. On the other hand, if a game person does press actuation of the left earth-switch 9L, decision of YES will be made by S89, it will progress to S90, a left reel halt flag will be set, and halt control of the left reel will be carried out. Next, if a game person does press actuation of inside earth-switch 9C, decision of YES will be made by S91 and it will progress to S92, and an inside reel halt flag is set, and halt control of the inside reel is carried out. If a game person does press actuation of the right earth-switch 9R, decision of YES will be made by S93 and it will progress to S94, and a right reel halt flag is set, and halt control of the right reel is carried out. Next, the case where a game person does press actuation simultaneous [each two or more earth switches 9L, 9C, and 9R] is explained. For example, while halt control of the left reel is carried out so that decision of YES may be first made by S89, it may progress to S90, a left halt flag may be set and it may mention later when a game person does press actuation of left earth-switch 9L and inside earth-switch 9C simultaneously, decision of YES is made by S91 and it progresses to S92, and halt control of

the inside reel is carried out so that an inside reel halt flag may be set and it may mention later. Thus, even if a game person does press actuation of two or more earth switches simultaneously, there is no inconvenience by which halt control of the reel equivalent to the earth switch by which press actuation was carried out will be carried out, and halt actuation of one of carbon buttons will be made an invalid. This is also the same as when press actuation is carried out simultaneous [three earth switches 9L, 9C, and 9L].

[0069] Next, when decision whether the right reel halt flag is set by S104 when decision whether the inside reel halt flag is set by S100 when decision whether the left reel halt flag is set by S96 is made and is not set is made and is not set is made and is not set, it progresses to S108. When the left reel halt flag is set, it progresses to S97, decision whether a left reel is rotating is made, when it is under revolution, after reel halt control is performed by S98, it progresses to S99, and a left reel halt flag is cleared. On the other hand, when the left reel has already stopped, decision of NO is made by S97 and it progresses to S99 directly. Since the same processing as S96 explained by the left reel also about the inside reel and the right reel thru/or S99 is performed, a repetition of explanation is omitted here. Next, it shifts to the processing of a winning-a-prize judging which decision of YES is made by S87 in the phase which all the reels stopped, and is shown in drawing 16 .

[0070] Decision whether the pattern currently displayed by any two reels which progressed to S108 on the other hand when decision of NO was made by S104, and have stopped is the pattern of a reach condition is made. A reach condition is the phase as for which any one of two or more adjustable displays 5L, 5C, and 5R is still indicating by adjustable, and means the case where it is in the predetermined display condition of fulfilling the conditions from which the display result of the already stopped adjustable display serves as combination of specific identification information, such as "AAA" and "BBB." And although it progresses to S87 when it is judged by S108 that it is not in a reach condition When it is judged that it is in a reach condition, progress to S109, and decision whether the big bonus success-in-an-election flag or the bonus success-in-an-

election flag is set should do. When neither is set, it progresses to S87, but it progresses to S87, after progressing to S110 and generating a reach sound from a loudspeaker 28, when either is set. By emitting this reach sound, it is dependent on the display result at the time of a halt of an adjustable display in which the game person is indicating by current adjustable, and the hope of the game person that the combination of said specific identification information may be organized can be enlivened effectively. In addition, it may be made to display the purport which replaced with it in addition to generating a reach sound from a loudspeaker 28, and the reach condition generated. Moreover, it may be made to perform information at the time of reach only at the time of a big bonus success-in-an-election flag set, and may be made to report only at the time of the reach of the direction where one of success-in-an-election flags are set.

[0071] Drawing 13 thru/or drawing 15 are flow charts which show the concrete content of the reel halt control defined by S98, S102, and S106. Processing which checks a current pattern number is first performed by S111. This pattern number is checked based on those of 0-20 (refer to drawing 3) with 21 piece, the delivery number of steps of the reel drive motors (stepping motor) 7L, 7C, and 7R, and the criteria location detecting signal of the reel location sensors 8L, 8C, and 8R, as mentioned above. Next, decision whether the bonus game flag is set by S112 is made. When the bonus game flag is set, it progresses to S113, and decision whether other two reels have stopped is performed. Other two reels mean reels other than the reel which is going to perform halt control at present. And in the phase which other two reels have not stopped yet, it progresses to S120, and control which stops the JAC pattern which is within 4 pattern point from the current pattern number checked by S111 on an effective effective line is performed, and it progresses to S152. In the case of a slot machine, in order to make it the method of halt control not become unnatural, after a game person does press actuation of the stop buttons 9L, 9C, and 9R, a reel [/ in the existing limited very short predetermined time for about 0.2 seconds] must be stopped, and angle of rotation which a reel can rotate in the very short predetermined time is four patterns extent. Therefore, by S120, after

press actuation of the stop button is carried out, since it is impossible to carry out halt control of the JAC pattern which exists four or more patterns ahead on an effective effective line, when a JAC pattern is within 4 pattern point, halt control of the JAC pattern is carried out on an effective line. In addition, as shown in drawing 3 , when the present pattern number is not a JAC pattern, the pattern array is constituted so that a JAC pattern may surely exist within the limits of 4 pattern point from the present pattern number. thus, a current halt -- it is going to carry out -- when a reel is not the last reel, it is controlled to stop a JAC pattern on the effective line which is effective irrespective of whether the JAC winning-a-prize flag is set, and thereby, after a game person hopes, it comes to gaze at a halt of a reel. Next, it progresses to S152, while switching off the actuation effective lamp corresponding to the reel suspended among the actuation effective lamps 11L, 11C, and 11R, control which emits a reel halt sound from a loudspeaker 28 is performed, and a return is carried out to either S99, S103 or S107.

[0072] A bonus game flag is set, and when other two reels stop and are, it progresses to S104 and decision whether the JAC winning-a-prize flag is set is made, only when set, it progresses to S120, and when not set, it progresses to S115. In S115, from a current pattern number, the JAC pattern which is within 4 pattern point is removed from an effective effective line, and it stops, and progresses to S152 after that. That is, since the JAC winning-a-prize flag is not set, it does not go for the reason for forming the combination of a JAC pattern on an effective effective line, therefore from an effective effective line, a JAC pattern is shifted compulsorily and stopped.

[0073] Next, when the bonus game flag is not set, it progresses to S116, decision whether the big bonus game flag is set is performed, when the big bonus game flag is set, it progresses to S117, decision whether the JAC winning-a-prize flag is set is made, when the JAC winning-a-prize flag is set, it progresses to S118, and decision whether other reels have stopped is made. And in the phase which other reels have not stopped, it progresses to said S120 and control which stops a JAC pattern on an effective effective line like the

above-mentioned is performed. It is made to stop on the effective line of the JAC pattern of the reel which has stopped the JAC pattern which is within 4 pattern point from a current pattern number, on the other hand, when other reels have already stopped, it progresses to S119, halt control is carried out so that the combination of a JAC pattern may be organized on an effective effective line, and it progresses to S152 after that.

[0074] On the other hand, when the big bonus game flag is not set, and when the JAC winning-a-prize flag is not set, it progresses to S121, and decision whether the re-game success-in-an-election flag is set is performed. When the re-game success-in-an-election flag is set, it progresses to S122, decision whether other reels have stopped is made, when other reels have not stopped yet, it progresses to S123, and the control which places neatly on the effective line of the JAC pattern which has stopped the JAC pattern which is within 4 pattern point from a current pattern number, and is stopped is made, and it progresses to S152. On the other hand, when other reels have stopped, it progresses to S124, and the control which places neatly on the effective line of the JAC pattern which has stopped the JAC pattern which is in 4 pattern point from a current pattern number, and is stopped is made, and it progresses to S152.

[0075] On the other hand, when the re-game success-in-an-election flag is not set, it progresses to S125, and decision whether the big bonus success-in-an-election flag is set is performed. When the big bonus success-in-an-election flag is set, it progresses to S126, and it progresses, after [S152] progressing to S127, making decision whether a big bonus pattern (this example A) is within 4 pattern point from a current pattern number and stopping a big bonus pattern on an effective line by S128 in a certain case, when decision whether other reels have stopped is made and other reels have not stopped yet. On the other hand, when there is no big bonus pattern within 4 pattern point from a current pattern number, initiation of the big bonus game in the game of the time is given up, and it progresses to S139. In addition, when decision of NO is made by S127, the attempt is repeatedly performed until the control which uses a big bonus

pattern as a halt ** plug on an effective line again in a next game is tried and a big bonus pattern stops on an effective line actually, since a big bonus success-in-an-election flag is in a condition [being set succeedingly].

[0076] Next, when it is judged that other reels have stopped by S126, it progresses to S129. Decision whether a big bonus pattern is on an effective line is made, and, in a certain case, it progresses S130. Decision whether the big bonus pattern which can be stopped on the effective line of a stopped big bonus pattern is within 4 pattern point from a current pattern number should do. In a certain case, it progresses S131, and control stopped on the effective line of the big bonus pattern of the reel which has stopped the big bonus pattern is performed. When the big bonus pattern which can be stopped on the effective line of a stopped big bonus pattern by S130 on the other hand is judged that there is nothing within 4 pattern point, initiation of the big bonus game of the time is given up like the above-mentioned, it progresses to S139, and halt control of an adjustable display with which initiation of a big bonus game is again performed in a next game is tried.

[0077] When the big bonus success-in-an-election flag is not set, it progresses to S132, decision whether the bonus success-in-an-election flag is set is performed, when the bonus success-in-an-election flag is set, it progresses to S133, and decision whether other reels have stopped is made. In the phase which other reels have not stopped, control which it progresses to S134, and decision whether a bonus pattern (this example B) is within 4 pattern point from a current pattern number is made [control], and it progresses [control] S135 in a certain case, and stops a bonus pattern on an effective effective line is performed, and it progresses to S152. On the other hand, when it is judged that there is no bonus pattern by S134, it progresses to S152. Next, when it is judged that other reels have already stopped by S133, it progresses to S136, and when decision whether a bonus pattern is on an effective line is made and there is nothing, it progresses to S139. decision whether the bonus pattern which can stop on the effective line of the bonus pattern which progressed to S137 on the other hand when a bonus pattern was on an effective line, and has

stopped is within the 4 pattern point from a current pattern number does -- although it progresses to S139 when there is nothing, in being, it progresses to S138, and the control which suspends on the effective line of the bonus pattern of the reel which has stopped a bonus pattern is made, and it progresses to S152.

[0078] On the other hand, when it is judged that the bonus success-in-an-election flag is not set by S132, it progresses to S139, decision whether the role success-in-an-election flag of small is set is made, when it is judged that the role success-in-an-election flag of small is set, it progresses to S140, and decision whether other reels have stopped is made and it progresses to S144 in the phase which other reels have not stopped yet. In S144, when decision whether the role pattern of small corresponding to the class of set role success-in-an-election flag of small is within 4 pattern point from a current pattern number is made and there is nothing, it progresses to S146, and a reel is stopped immediately and it progresses to S152. On the other hand, when it is judged that there is a role pattern of small by S144, it progresses to S145, and control which stops the role pattern of small on an effective line is performed, and it progresses to S152. Next, decision of YES is made by S140 in the phase which other reels have stopped, and it progresses to S141. Although it progresses to S147 when decision whether the role pattern of small is on an effective line is made and there is nothing, in being, it progresses to S142. Decision whether the role pattern of small which can be stopped on the effective line of the stopped role pattern of small is within 4 pattern point from a current pattern number should do. Although it progresses to S147 when there is nothing, in being, it progresses to S143, and after [S152] control suspended on the effective line of the role pattern of small of the reel which has stopped the role pattern of small is performed, it progresses.

[0079] When it is judged that the role success-in-an-election flag of small is not set by S139, it progresses to S147. Decision whether other two reels have stopped should do in S147. Decision of being a left reel should do [the reel which is going to progress to S149 in the phase which has not been stopped yet,

and is going to carry out a current halt]. In not being a left reel, after [S152] carrying out halt control immediately by S150, it progresses, but when it is a left reel, it progresses to S151, and it progresses to S152, after carrying out halt control so that the single pattern F may not stop on an effective line. That is, since role winning a prize of small is materialized, it shifts compulsorily and is made to stop by S151 by the single pattern F having stopped on the effective line so that the single pattern F may not be stopped on an effective line in spite of having judged that the role success-in-an-election flag of small was not set by S139. Moreover, decision of YES is made by S147 in the phase which other two reels have already stopped, and it progresses to S148, and it progresses to S152, after carrying out halt control so that neither of the patterns may gather on an effective line. thus, when any success in an election cannot be found Since the reel suspended by the 1st and the 2nd almost (S89, S91, S93) stops by detecting halt actuation of a game person in an instant, In the case of the game person excellent in the technique of operating stop buttons 9L, 9C, and 9R while planning timing, it becomes possible to make a reach condition suspend frequently the reel suspended by the 1st and the 2nd. And although it becomes it is loud and jarring in having generated the reach sound in whenever [the], since the reach sound is generated only when the big bonus and the bonus success-in-an-election flag are set as shown in S109, there is also no inconvenience which becomes jarring at this example. When the role success-in-an-election flag of small is set, processing which it is at the termination event of one game, and clears the role success-in-an-election flag of small is performed (S200 reference). therefore, in spite of setting the role success-in-an-election flag of small, when the role pattern of small according to the class of the role success-in-an-election flag of small is not able to be placed neatly on an effective line on the relation of the pattern array of a reel in the game of the time The role success-in-an-election flag of small is cleared, the role success in an election of small becomes invalid, the role success-in-an-election flag of small is taken over to a next game, and control of placing the role pattern of small neatly on an effective line in a next game is not performed.

[0080] An adjustable display-control means to control said adjustable display by said S63 thru/or S152 is constituted.

[0081] Drawing 16 is a flow chart which shows the program of winning-a-prize judging processing. First, when decision whether it progresses to S159 when decision whether the bonus game flag is set by S153 is made and is not set, and the big bonus game flag is set is made and is not set, it progresses to S163, and decision whether winning a prize was on the effective line is made. When there is no winning a prize on an effective line, after progressing to S164 and setting the number of expenditure schedules to "0", it shifts to the coin expenditure control shown in drawing 16 . The effective line display lamp corresponding to the effective line which progressed to S165 on the other hand when it was judged that winning a prize was on the effective line by S163, and won a prize is blinked. In addition, when winning a prize arises on two or more effective lines, the effective line which the winning a prize produced is blinked. Next, it progresses to S166 and decision whether the winning a prize is big bonus winning a prize is made. When it is judged that it is not big bonus winning a prize, it progresses to S168, decision whether the winning a prize is bonus winning a prize is made, and when it is judged that it is not bonus winning a prize, decision whether it is re-game winning a prize is made by S170. After progressing to S175 and setting the number of expenditure schedules to the value corresponding to the role of small since the winning a prize is role winning a prize of small when it is judged by S170 that it is not re-game winning a prize, it shifts to the coin expenditure processing shown in drawing 17 .

[0082] When it is judged by S166 that it is big bonus winning a prize, it progresses to S167. Make each **** success-in-an-election decision value into the value at the time of a big bonus, and a big bonus game counter is set to "30." Set the count counter of a bonus to "3", and a big bonus success-in-an-election flag is cleared. The number of expenditure schedules is set to "15", a big bonus game flag is set, the game effectiveness lamp is blinked in the 1st mode, and processing which generates a big bonus sound from a loudspeaker is performed. Since the control which sets each of this **** success-in-an-

election decision value to the value at the time of a big bonus, and increases substantially the number of each **** success-in-an-election decision value is made, the probability of each **** success in an election improves substantially, and it is controlled so that the role pattern of small gathers in a high probability at the time of a big bonus game. In addition, it may be made to carry out the ** game over of the predetermined thing among two or more kinds of role success-in-an-election flags of small, without judging especially the role success in an election of small in a big bonus game. On the other hand, when it is judged by S168 that it is bonus winning a prize, it progresses to S169, and a bonus game counter is set to "12", a JAC winning-a-prize counter is set to "8", a bonus success-in-an-election flag is cleared, the number of expenditure schedules is set to "15", a bonus game flag is set, the game effectiveness lamp is blinked in the 2nd mode, and processing which generates a bonus sound from a loudspeaker is performed.

[0083] Next, when decision of YES is made by S153, it progresses to S154, "1" subtraction of the bonus game counter is carried out, it progresses to S155, and decision whether JAC winning a prize is on an effective line is made, when the bonus game flag is set, and there is nothing, it pays out, a constant is beforehand set to "0", and it shifts to coin expenditure control. On the other hand, when JAC winning a prize is on an effective line, it progresses to S156, and the number of expenditure schedules is set to "15", and "1" subtraction of the JAC winning-a-prize counter is carried out, and by S157, after blinking the effective line display lamp equivalent to the effective line which won a prize, it shifts to coin expenditure control.

[0084] Next, although it progresses to S163 when decision of YES is made by S159, it progresses to S160, "1" subtraction of the big bonus game counter is carried out, and decision whether an effective line has JAC winning a prize by S161 is made, when the big bonus game flag is set, and there is nothing, in a certain case, it progresses S162. In S162, a bonus game counter is set to "12", a JAC winning-a-prize counter is set to "8", a bonus game flag is set, the number of expenditure schedules is set to "8", the game effectiveness lamp is

blinked in the 2nd mode, and a bonus sound is generated from a loudspeaker. Thus, said S169 is processing performed when [which is not a big bonus game] a bonus game is usually started at the time of a game, and the direction of S162 is processing performed when a bonus game is materialized in the phase where the big bonus game is started.

[0085] The processing which it progresses to S171 on the other hand when it is judged by S170 that it is re-game winning a prize, the processing which stores the random value R of a random counter (refer to drawing 6) is made, and generates a re-game sound from a loudspeaker 28 by S172 while turning on or blinking the re-game display lamp 64 and performing a re-game display is made. Next, it progresses to S173 and decision whether there was any start actuation is made, and it stands by until it is. And when a game person operates the start lever 12, after control progresses to S174 and a re-game success-in-an-election flag is cleared, it shifts to the reel revolution processing shown in drawing 9 . Consequently, since the roll control of a reel is performed without performing the program shown in drawing 7 and drawing 8 , without receiving the additional input of the number of bets, the number of bets already inputted last time is carried over, and a re-game is performed.

[0086] When it progresses to S175B and decision whether the bonus game flag is set is made by it, after the number of expenditure schedules is set to the value (15, 8, 6, or 3 of drawing 11) corresponding to the role of small by S175A, and set, it shifts to the coin expenditure processing shown in drawing 17 . On the other hand, when not set, it progresses to S175C, decision whether the big bonus game flag is set is made, and when set, it shifts to the coin expenditure control shown in S17. And when the big bonus game flag is not set, it progresses to S175E. In addition, S175D is a step which is inserted in the case of another example mentioned later. In S175E, processing to which the value of the number counter of the charge is added to the number of the accumulation charge, and the value of the number of expenditure schedules is added to the number of accumulation expenditure is performed. Next, it progresses to S175F, processing which computes the number of accumulation expenditure / the

number of the accumulation charge is performed, and processing which computes the value grant situation by the slot machine 1 is performed.

[0087] Next, he progresses to S175G and decision whether the role judging mode of small has become at "the time of a high probability" should do. When having not become, it progresses to S175H, decision whether the calculation value computed by S175F is under 0.4 (lower limit at the time usually) is made, and in being less than 0.4, after setting the role judging mode of small at "the time of a high probability", it progresses to S175L by S175I. On the other hand, when a calculation value is 0.4 or more, it progresses to S175L as it is. When the judgment result of S175G and the role judging mode of small have become at "the time of a high probability", it progresses to S175J, and decision whether the calculation value computed by S175F is more than 0.5 (upper limit at the time of a high probability) is made. And it progresses to the case of 0.5 or more S175K, and it progresses to S175L, after setting the role judging mode of small to "being usually at the time." On the other hand, when a calculation value is judged to be less than 0.5 by S175J, it progresses to S175L as it is. Thus, when the role judging mode of small is usually at the time and the rate of expenditure of the role of small breaks 40%, the role judging mode of small is updated at "the time of a high probability." Moreover, if the rate of expenditure of the role of small reaches to 50% when it is the role judging mode of small at the "high probability time", control to which the role judging mode of small is returned to "it is usually at the time" will be performed.

[0088] Next, although decision whether the number of the accumulation charge is more than "300" is made and it shifts to the coin expenditure control which it shows in drawing 17 as it is in not being above in S175L, in the above case, it progresses S175M, and after the processing which corrects the number of the accumulation charge and the number of accumulation expenditure to one half of values, respectively (below decimal point up valuation) is made, it shifts to coin expenditure control. This S175L and processing of S175M are processings for preventing that the number of the accumulation charge and the number of accumulation expenditure become a too much big value too much, when the

number of games increases.

[0089] The calculation approach of the expenditure situation of coin, i.e., a value grant situation, is not limited to the example shown in S175F. For example, the (number of number of the accumulation charge-accumulation expenditure) / the number of games You may make it compute. Moreover, the count of accumulation expenditure may be used instead of the number of accumulation expenditure of coin, or you may compute using both the number of accumulation expenditure, and the count of accumulation expenditure. Furthermore, the addition-and-subtraction counter which adds according to the number of the charge of coin, and is subtracted according to the number of expenditure of coin is formed, and it may be made to make the value of the addition-and-subtraction counter into a calculation value. In this example, since it was made to control by the comparison with a certified value only about the role probability of occurrence of small Usually, about generating of a big bonus or a regular bonus, it will be controlled by the timing extraction and the set point of the random value R, maintaining the rate of expenditure in a game at predetermined within the limits. It does not restrict that there are many high setting out or counts of bonus generating, and there is [stop / **********] also little low setting out, and it can be used as the game machine which can make the interest of a game maintain to a game person.

[0090] Although it faces computing the rate of expenditure by S175F and was made to compute in the example shown in drawing 16 based on the number of the coin charge at the time of the usual game except a big bonus game and a regular bonus game, and the number of coin expenditure, it replaces with it and you may make it compute also including the number of the coin charge in a big bonus game and a regular bonus game, and the number of coin expenditure. Moreover, only when the number of the accumulation charge of coin reaches a predetermined value, it may be made to perform the judgment of calculation of S175F, S175H, and S175J.

[0091] Next, another example in which the step of S175D was inserted is explained. This another example performs probability control of the role of small,

only when a three-sheet bet is usually performed at the time of a game, by S175D, only when the number counter of the charge is "3", progresses to S175E, performs probability control of the role of small, and when the number counter of the charge is not "3", it shifts to coin expenditure control as it is. In the case of this another example, each **** success-in-an-election allowed values C12, D12, E12, F12, C22, D22, E22, and F22 of the column of the number of the coin charge "1" in drawing 10 (b) and the "high probability" in "2" become unnecessary. It compares with the certified value which was able to define beforehand the value grant situation computed by at least one side among the accumulated of the accumulated of the number of inputs inputted with the number input means of bets by said S175E thru/or S175M, and the valuable value given by the value grant means, and the accumulated of the count of grant of valuable value. The probability control means which controls the probability for the display result of said adjustable display to serve as a specific display mode based on this comparison result is constituted.

[0092] Drawing 17 is a flow chart which shows the program of coin expenditure control. by S176, decision whether the number of expenditure reached the number of expenditure schedules should do first -- when you have not reached, progress to S177, and decision whether it is in credit game mode should do -- the case where it is not in credit game mode -- S180 -- progressing -- coin -- one-sheet expenditure -- it returns, after [S176] carrying out "1" stepping of the number of expenditure according to it. Although it progresses to S180 and coin is paid out when progressing to S178 on the other hand when it is credit game mode, and having come to make decision whether the credit counter is "50" which is the upper limit When having not become (i.e., when allowances are still in storage of a credit counter), while progressing to S179 and carrying out "1" stepping of the credit counter, it returns, after [S176] carrying out "1" stepping of the number of expenditure according to it. This processing of S177 thru/or S180 is repeatedly performed until it becomes the number of number of expenditure = expenditure schedules, expenditure of coin or addition processing to a credit counter is performed to whenever [that], and it

progresses to S181 in the phase in which the number of expenditure reached the number of expenditure schedules.

[0093] Decision whether the bonus game flag is set should do in S181. When the bonus game flag is not set, it progresses to S182. Decision whether the big bonus game flag is set should do. It returns to the game start processing which progresses to S200 when the big bonus game flag is not set, clears a JAC winning-a-prize flag, clears the role success-in-an-election flag of small, updates the number of the charge to the value of the number counter of the charge last time, clears the number counter of the charge, and is shown in drawing 7 (b). When progressing to S185 on the other hand when the bonus game flag is set, and having come to make decision whether the JAC winning-a-prize counter was set to "0", after a bonus game counter is cleared by S186, a JAC winning-a-prize counter is cleared by S188, and a bonus game flag is cleared. Although it progresses to S187 on the other hand when a JAC winning-a-prize counter is not "0", decision whether a bonus game counter is "0" is made, and it progresses to S188 in being "0", it returns to the game start processing which it progresses to S200 in not being "0", and a JAC winning-a-prize flag is cleared, and the role success-in-an-election flag of small is cleared, and is shown in drawing 7 (b). Thus, a bonus game flag is cleared in the phase in which the phase or JAC winning-a-prize counter with which the bonus game counter was set to "0" became "0", and a bonus game is completed.

[0094] Next, in S189, when decision whether the big bonus game flag is set is made and is not set, the processing which switches off the game effectiveness lamp 24 by S190 is made, and it progresses to S200. On the other hand, when the big bonus game flag is set, it progresses to S191, and the processing which carries out "1" decrement of the count counter of a bonus is made, and decision whether the count counter of a bonus was set to "0" is made by S192. When the count counter of a bonus is not "0", it progresses to S193, and the game effectiveness lamp is blinked in the 1st mode, the processing which generates a big bonus sound from a loudspeaker 28 is made, and it progresses to S200. On the other hand, it progresses, after [S195] progressing to S194 and clearing a

big bonus game counter, when the count counter of a bonus is "0."

[0095] Although it progresses to S183 and decision whether a big bonus game counter is "0" is made on the other hand, when a bonus game flag is not set and the big bonus game flag is set, and it progresses to S200 in not being "0", in being "0", it progresses to S184, and the processing which clears the count counter of a bonus is made, and it progresses to S195A. In S195A, while clearing a big bonus game flag and terminating a big bonus game, role judging mode of small is made "to be usually at the time", the number of the accumulation charge is set to "100", the number of accumulation expenditure is set to "50", and processing which switches off the game effectiveness lamp is performed. That is, since a big bonus game is completed in the phase in which the phase or the count counter of a bonus with which the big bonus game counter was set to "0" became "0" and it becomes a henceforth [it] usual game, while returning the role success-in-an-election judging mode of small to "it is usually at the time", control which returns the number of the accumulation charge and the number of accumulation expenditure to initial value (refer to S14A) is performed.

[0096] Next, it progresses to S195B, the processing which stores the random value R at present is made, and the processing which performs a predetermined operation by S195C using the stored value is made. this predetermined operation -- for example, it is the operation of computing an answer to the stored random value R by, cubing or assigning the random value R to a predetermined function further. [, taking advantaging or **(ing)] [subtracting a predetermined numeric value] [add] [squaring the random value R] Next, it progresses to S195D and processing of [result of an operation / the / a probability fluctuation success-in-an-election allowed value] is made. This probability fluctuation success-in-an-election allowed value is an allowed value which can raise the big bonus game probability of occurrence. Two kinds such as the two probability fluctuation success-in-an-election allowed value which this probability fluctuation success-in-an-election allowed value makes generate a probability fluctuation condition twice, and the one probability

fluctuation success-in-an-election allowed value which generates a probability fluctuation condition only once are defined. Processing by which it will progress to S195F and will set the schedule halt pattern of the count of a game and the adjustable drop 25 to "77" by S195E if the result of an operation is within the limits of a two probability fluctuation success-in-an-election allowed value is performed, and it progresses to S195J. On the other hand, when the result of an operation is within the limits of an one probability fluctuation success-in-an-election allowed value, decision of NO is made by S195E, decision of YES is made by S195G, it progresses to S195H, the processing which sets the schedule halt pattern of the count of a game and the adjustable drop 25 to "33" is made, and it progresses to S195J. On the other hand, when the result of an operation is not within the limits of a two probability fluctuation success-in-an-election allowed value and it is not within the limits of an one probability fluctuation success-in-an-election allowed value, either, it progresses to S195I, and the processing which separates from the schedule halt pattern of the count of a game and the adjustable drop 25, and is set to a halt pattern is made.

[0097] Next, in S195J, the timer for indicating the count of a game and the adjustable drop 25 by adjustable is set, and initiation control of the adjustable display is carried out. Next, it progresses to S195K and decision whether the set timer was completed is made, it stands by until it ends, and indicating the count of a game and the adjustable drop 25 by adjustable is continued. And it progresses to S195L in the phase which the timer ended, and halt control of the count of a game and the adjustable drop 25 is carried out so that it may become the halt pattern set by said S195F, 195H, or 195I. Next, it progresses to S195M, decision whether the special game condition that a halt pattern is set to "77" has occurred is made, in being "77", it progresses to S195N, and the processing which sets a probability fluctuation counter to "2" is made, and it progresses to S195Q. On the other hand, when the special game condition that a halt pattern is set to "33" has occurred, decision of YES is made by S195O, it progresses to S195P, the processing which sets a probability fluctuation counter to "1" is made, and it progresses to S195Q. A halt pattern separates, and when it is a

pattern, processing of S195N and S195P is not performed. Next, in not being "0", it progresses to S195R, it progresses to S195Q, decision whether the value of a probability fluctuation counter is "0" is made, in being "0", it progresses to S196, but the game effectiveness lamp is blinked in the 3rd mode, and it progresses, after [S196] displaying on a game person that it is in the probability fluctuation condition whose big bonus game probability of occurrence improved. In addition, the step of S195S may be inserted after this S195R. These S195S are processing which sets the role judging mode of small at "the time of a high probability." Consequently, when a probability fluctuation counter is not "0", the role judging mode of small will be set at "the time of a high probability." Since the rate of the role expenditure of small at "the time of a high probability" will become 100% (the so-called actual size return) while a big bonus success-in-an-election probability improves if it becomes by performing processing of said S175 and S195S at the time of probability fluctuation, a game can be performed without reducing coin until it wins a big bonus. Although the combination configuration of the adjustable drop which gives a lottery indication of whether it changes into a probability fluctuation condition was carried out in this example with the count of a game and the adjustable drop 25 which displays the count of a game, the adjustable drop only for lotteries may be formed. Moreover, it may be made to perform a lottery display using Reels 6L, 6C, and 6R. Furthermore, the probability transaction counts may be one kind or three kinds or more of counts, without being limited to two kinds. Moreover, it replaces with changing the probability transaction count, or you may make it change the success-in-an-election probability at the time of probability fluctuation in addition to it. moreover, these steps are performed although processing which sets a probability fluctuation counter to "2" and "1" is performed in said S195N and S195P instead -- "" -- alike -- +2 -- it may be made to take +one. Moreover, when a probability fluctuation counter is not "0", it may not be made not to cast lots by being made to repeal success in an election.

[0098] Furthermore, the lottery stage of whether to perform probability

fluctuation is not limited to an example. For example, you may be [at the time of big bonus success in an election / at the time of big bonus generating] stages, such as the next game after bonus game termination, at the time of bonus generating at the time of bonus success in an election at the time of a re-game at the time of the game which is a degree at the time of big bonus game termination, and specific role generating of small. When the display result of said adjustable display becomes the specific display mode defined beforehand by said S178 thru/or S200, the coin hopper 37 and the coin expenditure motor 38, and the expenditure coin sensor 39, a value grant means to give valuable predetermined value is constituted. Moreover, when the game condition of said game machine changes into the special game condition defined beforehand with the table data shown in said S195B thru/or S195P, S77A, S77B, S67, drawing 10 (a), (b), drawing 11 (a), and (b), the probability fluctuation control means which fluctuates the probability for the display result of said adjustable display to serve as said specific display mode is constituted.

[0099] Next, it progresses to S196 and decision whether it is set to game exaggerated ** is performed. It is set to nothing [game exaggerated] as it mentioned above, when the reset switch 4 was operated by ON at the power up (S3 reference). It is set to game exaggerated ** as it mentioned above, when a reset switch 4 was operated at OFF (S2 reference). By these S196 The existence of game over is judged, in the case of nothing [game exaggerated], it progresses S200, and return and game start processing are started by the game start henceforth shown in drawing 7 (b). On the other hand, when judged as game exaggerated **, while progressing to S197 and displaying a code "OF" with the expenditure numeral vessel 27, processing which generates a game exaggerated sound from a loudspeaker 28 is performed. Thereby, a slot machine serves as game over (close condition). And it progresses to S198 and decision whether reset action occurs is made, and processing of S197 is continued until it is. And if the official in charge of an amusement center inserts a predetermined key in key-hole 3b for reset and operates a reset switch 4, decision of YES is made by S198 and it progresses to S199, the code

designation of "OF" is cleared, and after [S200] a game exaggerated sound is stopped, it will progress. According to the operating gestalt of an amusement center, that what is necessary is just to choose so that a close means may be operated with a close selection means in the amusement center which makes premium exchange perform to whenever [the] in the phase in which the slot machine reached the close condition by constituting thus, on the other hand What is necessary is just to choose in the amusement center which has adopted the so-called non-quantum method which continues a game succeedingly, without carrying out premium exchange even if a slot machine kills and it reaches a condition, so that a close means may not function with a close selection means.

[0100] There is the following as other methods of performing control about the close of a slot machine according to the operating gestalt of such an amusement center.

[0101] Next it is the processing of S195 shown in drawing 17 , for example, the timer for automatic reset is set, processing which generates the display of a code "OF" and a game exaggerated sound next is performed, and the step which judges the existence of game over next is prepared. And when it progresses to the step which judges whether the timer for automatic reset was completed when judged as nothing [game exaggerated] and the timer is not completed, it returns to the step which displays said code "OF" again and generates a game exaggerated sound. And processing which performs the clearance of code designation and a halt of a game exaggerated sound in the phase which the timer for automatic reset ended is performed, and it returns to S200 shown in drawing 17 below. On the other hand, when judged as game exaggerated "" in the step which judges the existence of game over, it shifts to the step which judges the existence of reset action. And when it is judged that there is no reset action, it returns to the processing which displays said code "OF" and generates a game exaggerated sound. And when judged as reset action "", it progresses to said code designation clearance and the processing which stops a game exaggerated sound, and it progresses to S200 of drawing

16 after that.

[0102] that is, when set as nothing [game exaggerated] by said S1 thru/or S3 Wait until the timer for automatic reset is completed, clear the code designation of the purport which expresses game over automatically in the ended phase, stop a game exaggerated sound, and it is made to return to game start processing. It is made to make the close condition of performing code designation showing game over and generating a game exaggerated sound from a loudspeaker maintain, when game exaggerated ** is set up until there is actuation of a reset switch 4. Moreover, a manual close discharge means by which manual operation performs close discharge is constituted by the processing step which the step and code designation which judge whether said reset action occurs are cleared [step], and stops a game exaggerated sound. Moreover, a close discharge mode selection means to choose either among the close discharge by said automatic close discharge means and the close discharge by said manual close discharge means is constituted by said S1 thru/or S3. When it is the mode of game exaggerated nothing according to this another example, if a big bonus game is completed, it will once become game over (close condition), and since game over is automatically canceled when predetermined time passes, only the predetermined time used as game over will be in the condition that a game is not performed. Consequently, in case the disadvantageous information on profit information, such as charge coin, premium coin, etc. is totaled with the management computer for holes, it also becomes possible to make into a break the game exaggerated condition that a game is not performed, to make the period from big bonus game initiation until game exaggerated into one unit from game exaggerated discharge till the next game over, and to total information.

[0103] In addition, although from revolution initiation of a reel before expenditure termination of coin was made not to lend out coin, even if a loan is always possible, it is good. Moreover, the slot machine of the type which performs a game instead of coin using a pachinko ball is sufficient as this invention. In that case, the number input means of bets detects the number of the pachinko ball

which the game person threw in as the number of bets. Moreover, the slot machine with which a game is performed using valuable worth of game person possession which inserts record media, such as a card, and is specified by the recording information of the record medium is sufficient. In this case, an actuation detection means to detect actuation of the game person for using a part of valuable worth of said game person possession as the number of bets turns into the number input means of bets. Furthermore, the thing which loses a stop button and an adjustable indicating equipment stops automatically by the predetermined passage of time, or a start lever may be lost, and an adjustable indicating equipment may carry out adjustable initiation by the input of the number of bets. When the display result of said adjustable display becomes the specific display mode defined beforehand by said S176 thru/or S200, the coin hopper 37 and the coin expenditure motor 38, and the expenditure coin sensor 39, a value grant means to give valuable predetermined value is constituted. This value grant means replaces coin with what is paid out as a prize, for example, a pachinko ball may be paid out or it may pay out the record medium which added the score and recorded that score at the time of game termination. In addition, what kind of thing is sufficient as the class of adjustable displays, such as what indicates the pattern by adjustable with the electric display which replaces an adjustable display with a revolution reel type, and consists of CRT, liquid crystal, LED, an electroluminescence, etc., a thing which the disk of two or more sheets with which the pattern was drawn rotates, and indicates by adjustable, a thing which the belt with which the pattern was drawn moves, or a thing of the so-called leaf type. Moreover, the number of adjustable displays is not limited to three pieces.

[0104] Next, another example of this invention is explained.

(1) As a special game condition that a probability fluctuation start condition is satisfied Said result of an operation of S66 For example, when it becomes a part of big bonus success-in-an-election allowed value within the limits or all values, When it becomes a part of regular bonus success-in-an-election allowed value within the limits or all values, When it becomes some [of a blank] values

within the limits, you may make it generate, when it becomes a part of each **** success-in-an-election allowed value within the limits or all values and becomes a part of re-game success-in-an-election allowed value within the limits or all values.

[0105] (2) When a big bonus game and a regular bonus game are completed by the specific pattern, you may make it said special game condition occur. For example, when a bonus game occurs in the specific number eye of games in a big bonus game, the case where JAC winning a prize occurs in the specific number eye of games in a bonus game etc. can be considered. Moreover, when the combination of the number of games at the time of said bonus game generating and the number of games at the time of generating of said JAC winning a prize becomes a specific pattern, you may make it a special game condition occur.

[0106] (3) When the adjustable display which consists of reels 6L, 6C, and 6R brings a display result set to start probability fluctuation, you may make it generate a special game condition. For example, when the pattern of dedication was established into the pattern array of a reel and the pattern stopped on the effective line (hit line), or when it determines a part of pattern combination (for example, "AAB") used as a blank as the display result used as probability fluctuation initiation and the combination of the pattern stops on an effective line (hit line), it is possible to make it be in a special game condition.

[0107] (4) When a predetermined period (number of predetermined games or number of the predetermined accumulation charge of coin) big bonus game does not occur, you may make it be in a special game condition. For example, when not generating a predetermined period big bonus game or regular bonus game, either and a predetermined period big bonus game does not occur, while a predetermined period big bonus game has not occurred, when a regular bonus game carries out count generating of predetermined, you may make it be in a special game condition.

[0108] (5) When the difference number and the rate of expenditure of a game machine become a predetermined value, you may make it be in a special game

condition. In this case, a difference number and the rate of expenditure can consider carrying out counting from the time of setting-out modification of a probability from the time of big bonus game termination of last time [time / of opening of an amusement center].

[0109] (6) It faces performing probability fluctuation control and you may make it make the number of combination of the pattern of the adjustable display which a big bonus game generates increase. When doing in this way and the actual probability of occurrence improves, the probability of occurrence for the display of an adjustable display also comes to improve.

[0110] (7) When it changes into a probability fluctuation condition, only as for ** big bonus game probability of occurrence, only ** regular bonus game probability of occurrence may be [** each **** probability of occurrence] made to carry out fluctuation control only of the ** re-game probability of occurrence. Or two or more things may be selected among the aforementioned ** thru/or **, and probability fluctuation control may be performed. When selecting these two or more things and performing probability fluctuation, with each probability fluctuation object, the opportunity of probability fluctuation may be the same and may differ.

[0111] (8) When the same conditions as the start condition of the above (1) are satisfied as conditions which end a probability fluctuation condition, you may make it make it end. In this case, the specific value with which the result of an operation of S66 is compared may be the same value as the start condition of the above (1), and may be a value different again.

[0112] (9) Probability fluctuation may be terminated when the same conditions as the probability fluctuation start condition shown above (2) are satisfied. In that case, the number of games and the specific pattern which were shown above (2) may be the same as a probability fluctuation start condition, and may differ from each other again. Moreover, when JAC winning a prize does not occur in the specific number eye of games in the case where a bonus game does not occur in the specific number eye of games in a big bonus game, or a bonus game, a probability fluctuation condition may be terminated. Furthermore,

when the combination of the number of games which said bonus game generated, and the number of games which said JAC winning a prize generated does not become a specific pattern, a probability fluctuation condition may be terminated.

[0113] (10) When the adjustable display from Reels 6L, 6C, and 6R brings a display result set to end probability fluctuation, a probability fluctuation condition may be terminated. The pattern of dedication is established into the pattern array of a reel, and, specifically, the case where the pattern stops on an effective line, the case where determined a part of combination used as the pattern of a blank as the display result used as probability fluctuation termination, and the combination of the pattern stops on an effective line, etc. can be considered. In these cases, the pattern of dedication and a part of combination may be the same as the pattern and combination which were defined by the start condition of the above (3), and they may differ from each other. Furthermore, when a display result which a regular bonus generates is brought, or when a display result which the specific role of small generates is brought, you may make it a probability fluctuation condition completed.

[0114] (11) When a predetermined period passes after probability fluctuation was started, a probability fluctuation condition may be terminated. For example, when the case where the number of predetermined games is reached, and coin reach the number of the predetermined accumulation charge after ** probability fluctuation condition began, you may make it end. Or when the role set as the object of the probability fluctuation control shown in ** above (7) carries out count generating of predetermined, a probability fluctuation condition may be terminated. Furthermore, when conditions are satisfied by the direction [it is early either] of the aforementioned ** or the **s, a probability fluctuation condition may be terminated.

[0115] (12) When the difference number of a game machine and the rate of expenditure reach a predetermined value, a probability fluctuation condition may be terminated. This difference number and rate of expenditure can consider carrying out counting from the time of setting-out modification of a

probability or probability fluctuation initiation from the time of opening of an amusement center.

[0116]

[Effect of the Invention] Since the probability for the display result of an adjustable display to serve as a specific display mode is changed when the game condition of a game machine changes into the special game condition defined beforehand according to this invention, it becomes the game which was rich in change, and a game person can be provided with an interesting game.

DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1] It is the whole front view showing the slot machine and card processor of an example of a game machine.

[Drawing 2] They are a slot machine and the whole card processor rear view.

[Drawing 3] It is the development view showing the pattern as identification information drawn on the periphery of a reel.

[Drawing 4] It is the side elevation of each reel.

[Drawing 5] It is the block diagram showing the control circuit used for a slot machine.

[Drawing 6] It is the flow chart which shows the processing program performed to a power up, and the interrupt program of random rolling-counters-forward processing.

[Drawing 7] It is the flow chart which shows the interrupt program of error-checking processing, and the program of game start processing.

[Drawing 8] It is the flow chart which shows the program of game start processing.

[Drawing 9] It is the flow chart which shows the program of reel revolution processing.

[Drawing 10] It is drawing showing the table data of the various success-in-an-

election allowed values memorized by ROM, and the field of various success-in-an-election allowed values.

[Drawing 11] It is drawing showing the field of various success-in-an-election allowed values.

[Drawing 12] It is the flow chart which shows the program of reel revolution processing.

[Drawing 13] It is the flow chart which shows the program of reel halt processing.

[Drawing 14] It is the flow chart which shows the program of reel halt processing.

[Drawing 15] It is the flow chart which shows the program of reel halt processing.

[Drawing 16] It is the flow chart which shows the program of winning-a-prize judging processing.

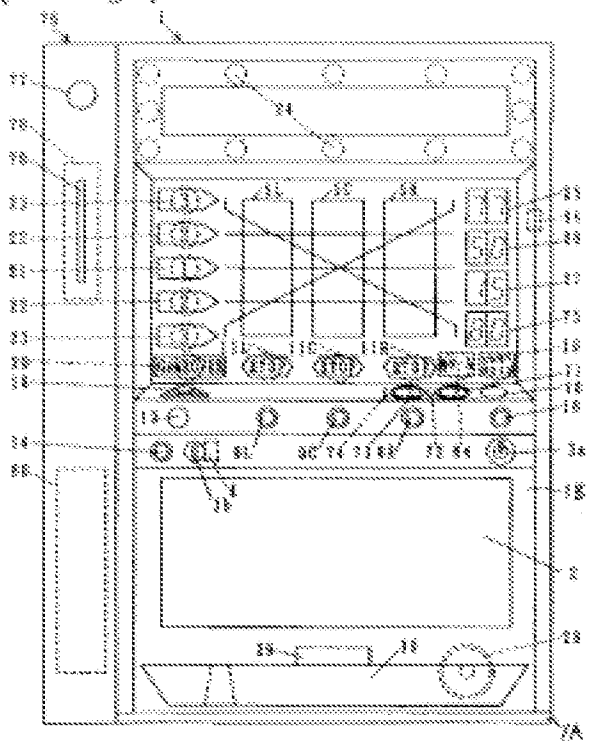
[Drawing 17] It is the flow chart which shows the program of coin expenditure processing.

[Description of Notations]

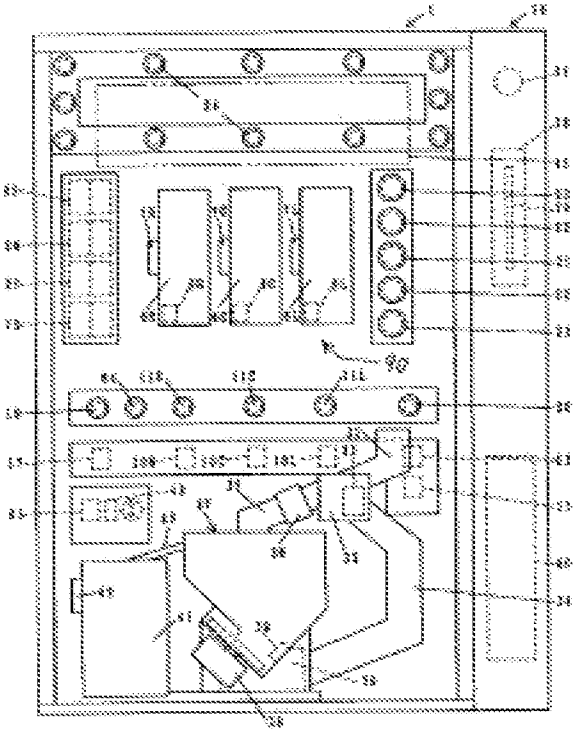
1 an adjustable display, and 6L, 6C and 6R for the slot machine of an example of a game machine, and 90 A reel, The coin slot from which 5L, 5C, and 5R constitute an adjustable display, and 18 constitutes a part of number input means of bets, The start lever from which 12 constitutes a part of number input means of bets, the credit manual operation button with which 14 constitutes a part of number input means of bets, 36 a start switch and 45 for a charge coin sensor and 13 A control section, 8L, 8C, and 8R -- for a card reader writer and 80, as for the count of a game and an adjustable indicator, and 71, a card processor control section and 25 are [a reel location sensor and 76 / a card processor and 78 / a loan carbon button and 72] loan switches.

DRAWINGS

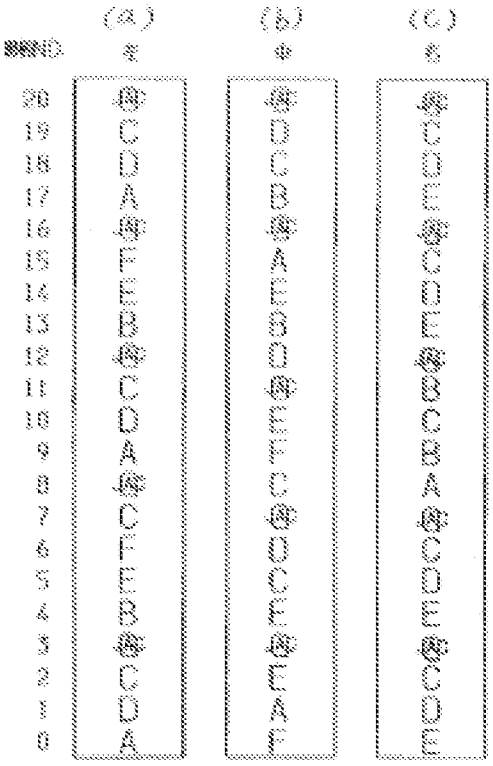
[Drawing 1]



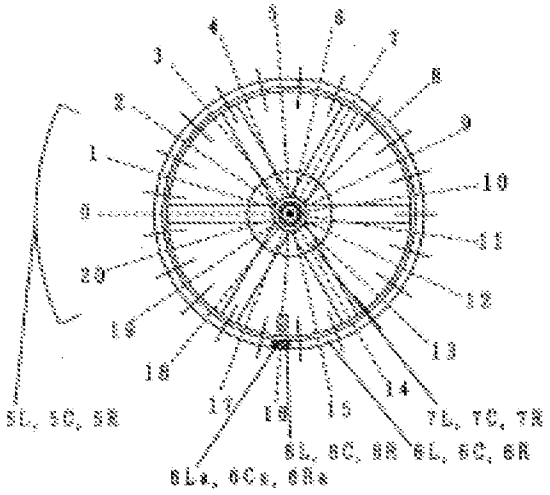
[Drawing 2]



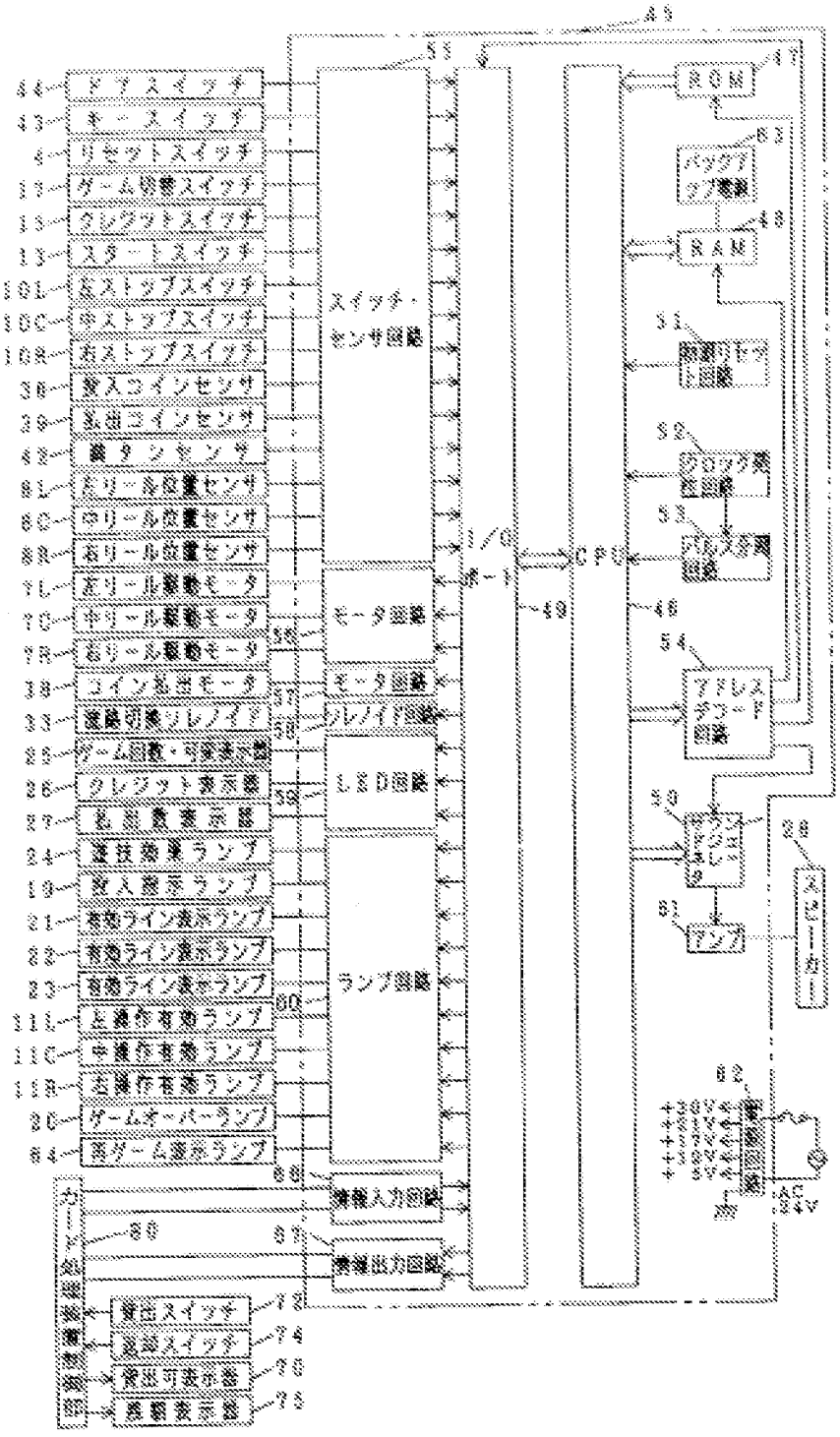
[Drawing 3]



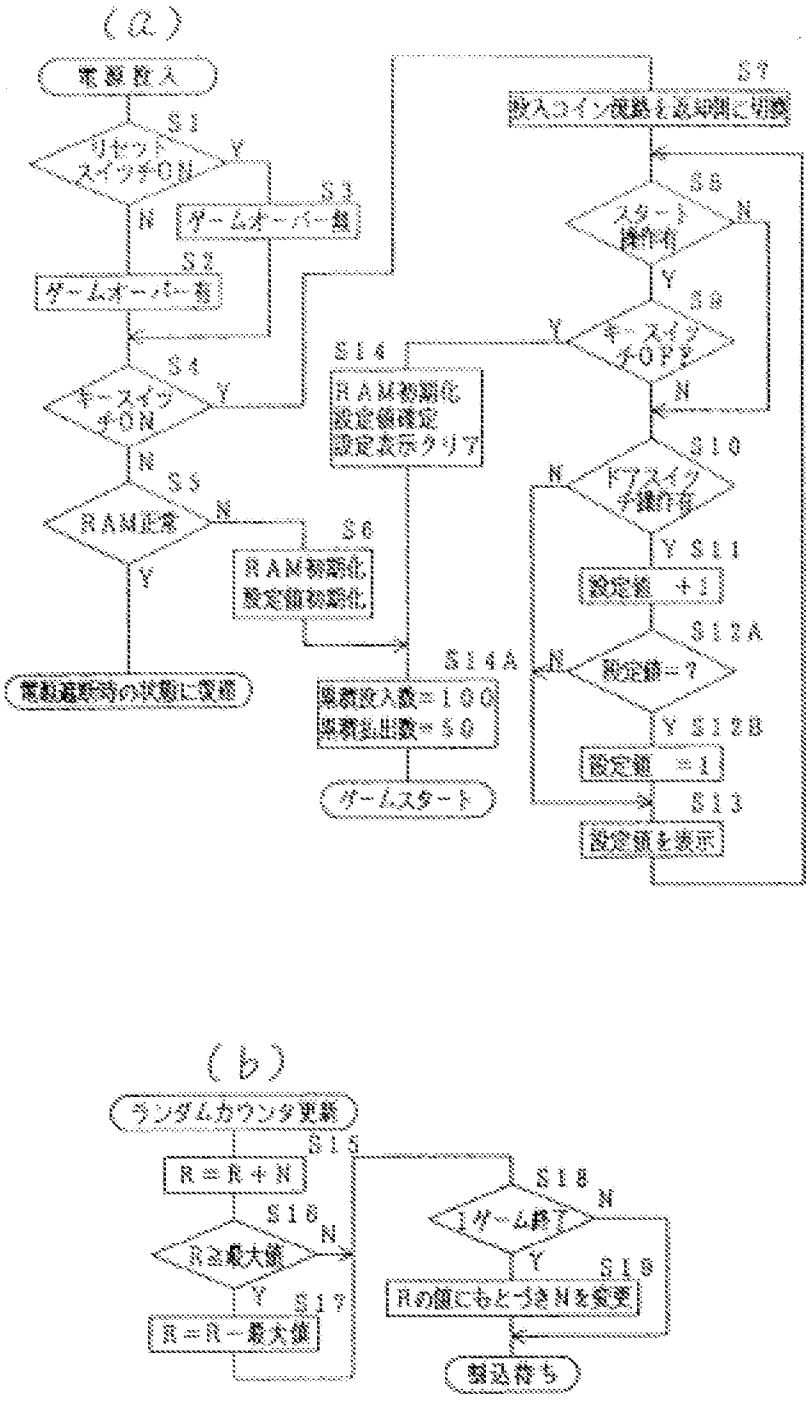
[Drawing 4]



[Drawing 5]

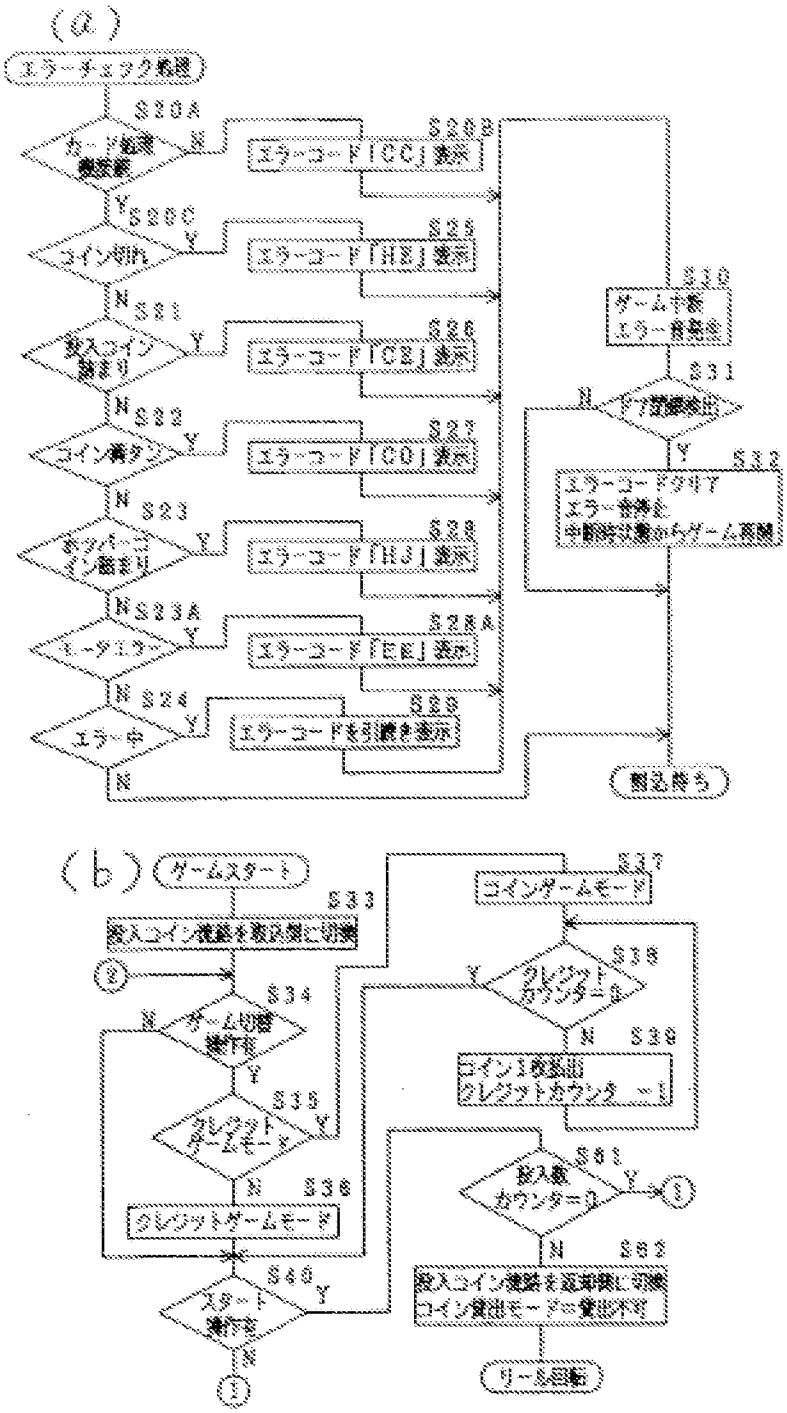

ROM
RAM
CPU
I/O
ポート
スイッチ・
センサ回路
モータ回路
LED回路
ランプ回路
ドア スイッチ
キー スイッチ
リセットスイッチ
ゲーム切替スイッチ
クレジットスイッチ
スター トスイッチ
左ストップスイッチ
中ストップスイッチ
右ストップスイッチ
投入コインセンサ
払出コインセンサ
払タンセンサ
左リール位置センサ
中リール位置センサ
右リール位置センサ
左リール駆動モータ
中リール駆動モータ
右リール駆動モータ
コイン払出モータ
遊技用乗りプレノイド
ゲーム回数・引数表示器
クレジット表示器
払出数表示器
遊技効果ランプ
投入指示ランプ
有効ライン表示ランプ
有効ライン表示ランプ
有効ライン表示ランプ
上操作有効ランプ
中操作有効ランプ
右操作有効ランプ
ゲームオーバーランプ
再ゲーム表示ランプ
情報入力回路
情報出力回路
カードR/W
賞出スイッチ
返却スイッチ
賞出可表示器
再遊表示器
アドレスデコード回路
ランプドライブ回路
アンプ
スピーカー
電源回路
AC 24V

[Drawing 6]

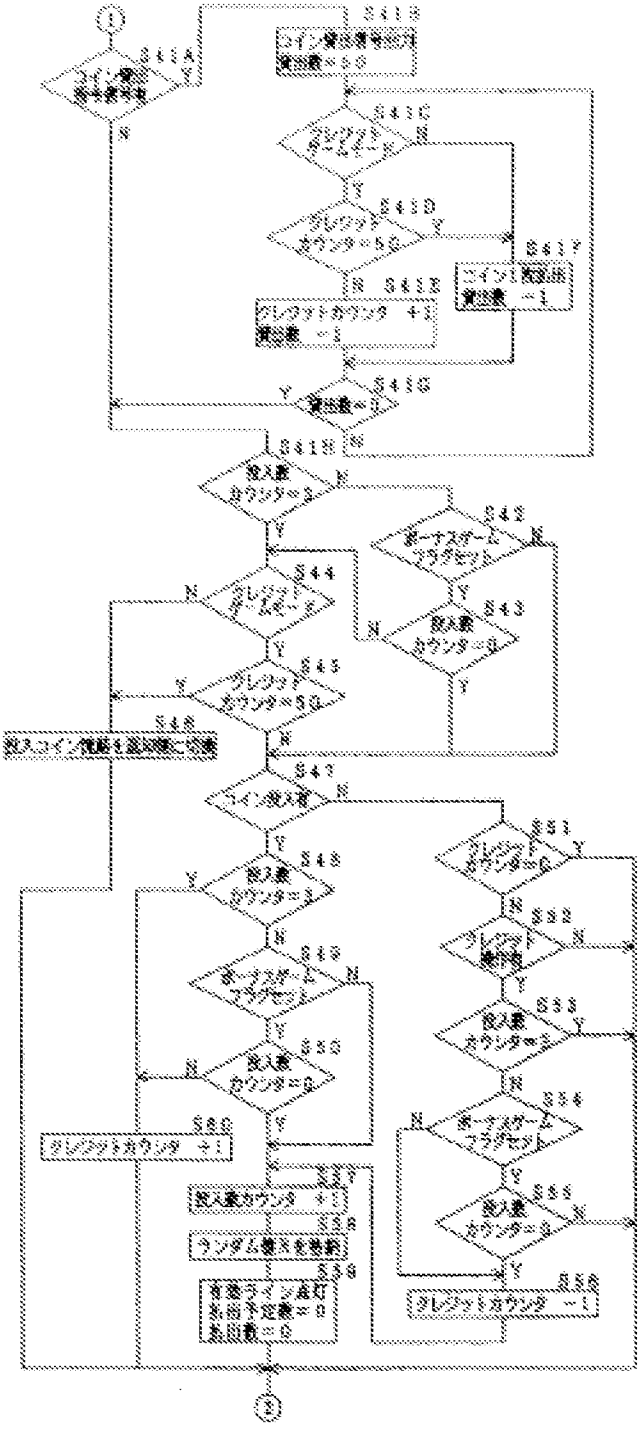

(a)
電源投入
S1
リセットスイッチON
Y
N
S3
ゲームオーバー表
S2
ゲームオーバー表
S4
キースイッチON
Y
N
S5
RAM正常
N
Y
S6
RAM初期化
設定値初期化
電源遮断時の状態に復帰
S14
RAM初期化
設定値確定
設定表示クリア
S14A
持点投入数=100
持点上限数=50
ゲームスタート
S7
投入コイン電源を返却口に切換
S8
スタート操作有
N
Y
S9
キースイッチOFF
Y
N
S10
トワスイッチ操作有
N
Y
S11
設定値 +1
S12A
N
設定値=7
Y
S12B
設定値 =1
S13
設定値を表示

(b)
ランダムカウンタ更新
S15
R=R+N
S16
N
R≧最大値
Y
S17
R=R−最大値
S18
N
1ゲーム終了
Y
S19
Rの値にもとづきNを変更
復帰待ち

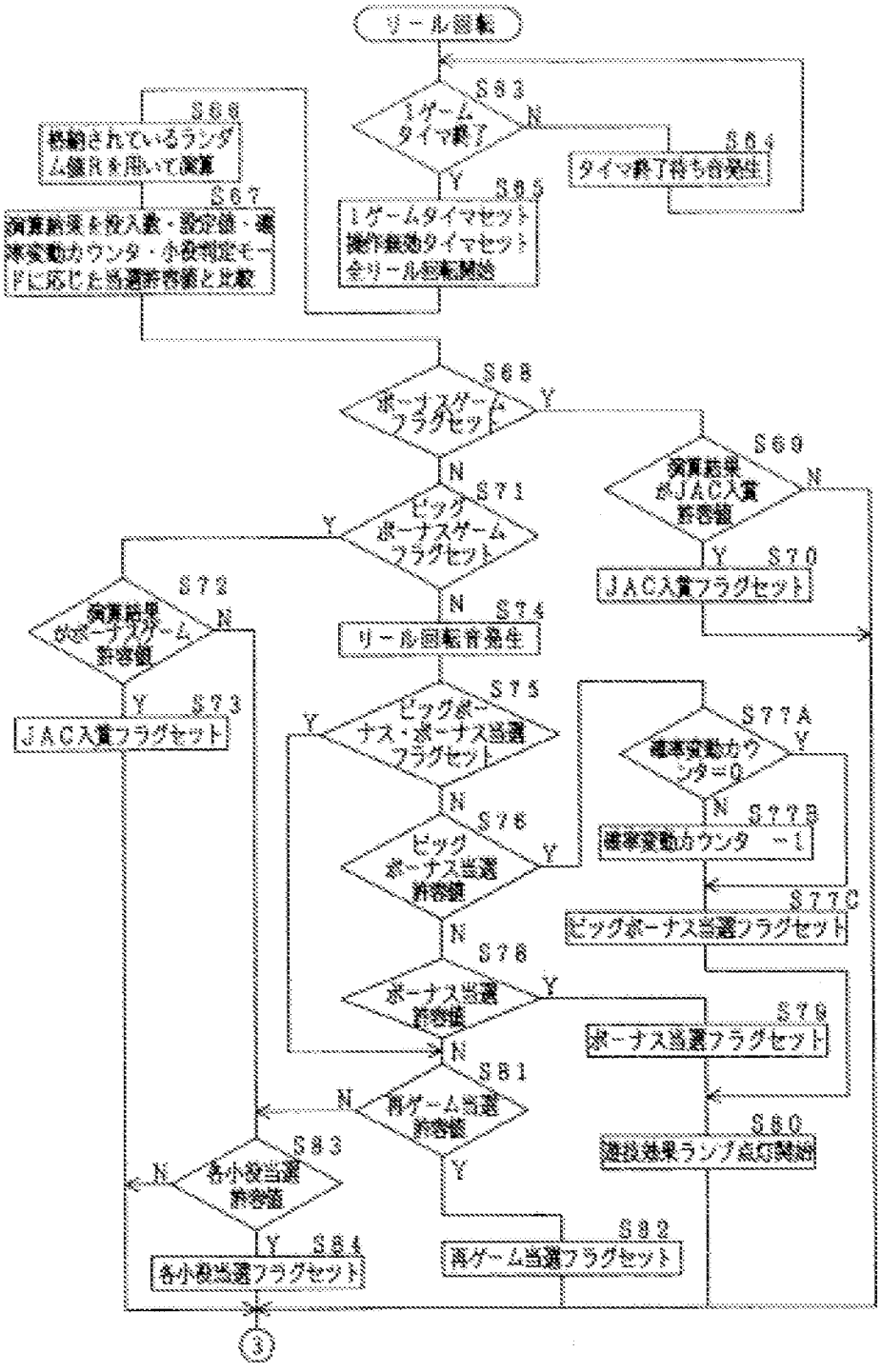
[Drawing 7]


(a)
エラーチェック処理
S30A
S30B
S30C
S25
S31
S26
S32
S27
S33
S28
S23A
S28A
S24
S29
S10
S31
S32
(b)
ゲームスタート
S33
S34
S35
S36
S40
S37
S38
S39
S41
S42
リール回転

[Drawing 8]



[Drawing 9]


リール回転
S63
1ゲームタイマ終了
N
S64
タイマ終了待ち音発生
Y
S65
1ゲームタイマセット
遊技制御タイマセット
全リール回転開始
S66
格納されているランダム値Rを用いて演算
S67
演算結果と投入数・設定値・確率変動カウンタ・小役判定モードに応じた当選判定値と比較
S68
ボーナスゲームフラグセット
Y
N
S69
演算結果がJAC入賞判定値
N
Y
S70
JAC入賞フラグセット
S71
ビッグボーナスゲームフラグセット
Y
N
S72
演算結果がボーナスゲーム判定値
N
Y
S73
JAC入賞フラグセット
S74
リール回転音発生
S75
ビッグボーナス・ボーナス当選フラグセット
Y
N
S77A
確率変動カウンタ=0
Y
N
S77B
確率変動カウンタ－1
S76
ビッグボーナス当選判定値
Y
N
S77C
ビッグボーナス当選フラグセット
S78
ボーナス当選判定値
Y
N
S79
ボーナス当選フラグセット
S81
再ゲーム当選判定値
N
Y
S80
遊技結果ランプ点灯開始
S83
各小役当選判定値
N
Y
S84
各小役当選フラグセット
S82
再ゲーム当選フラグセット
③

[Drawing 10]

(a)

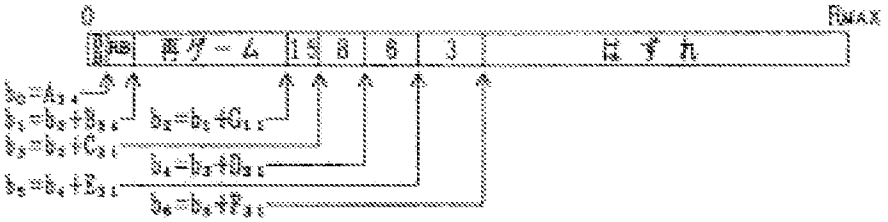
投入数 / 設定	1		2		3		
	BB	RB	BB	RB	BB		RB
					通常時	確変時	
1	A11	B11	A12	B12	A131	A141	B131
2					A132	A142	B132
3					A133	A143	B133
4					A134	A144	B134
5					A135	A145	B135
6					A136	A146	B136

(b)

小役 \ 投入数	1			2			3		
	通常	高確率	BB	通常	高確率	BB	通常	高確率	BB
15枚	C11	C12	C13	C21	C22	C23	C31	C32	C33
8枚	D11	D12	D13	D21	D22	D23	D31	D32	D33
6枚	E11	E12	E13	E21	E22	E23	E31	E32	E33
3枚	F11	F12	F13	F21	F22	F23	F31	F32	F33
次ゲーム(BB中はRB入賞)	G11		G12	G11		G22	G11		G12

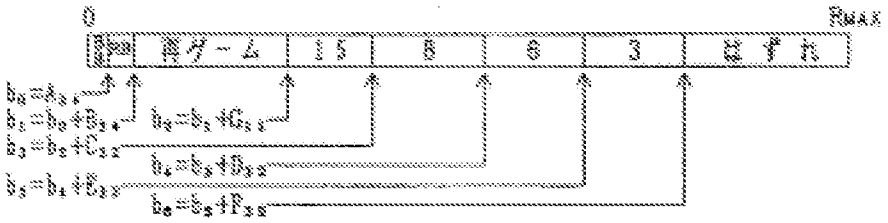
3枚掛け
小役判定モード＝通常時
乱数変動カウンタ＝0
設定＝4

(c)

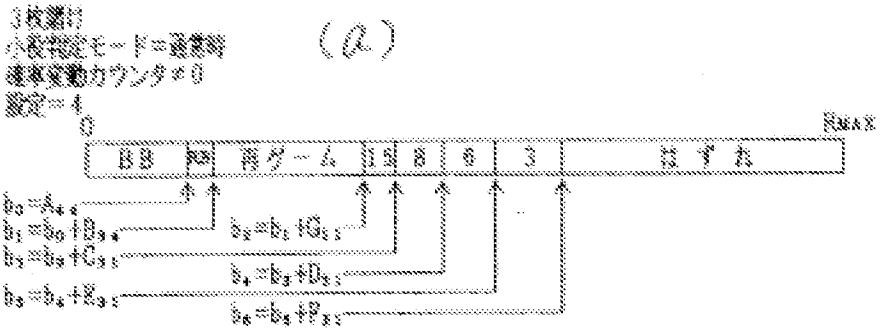


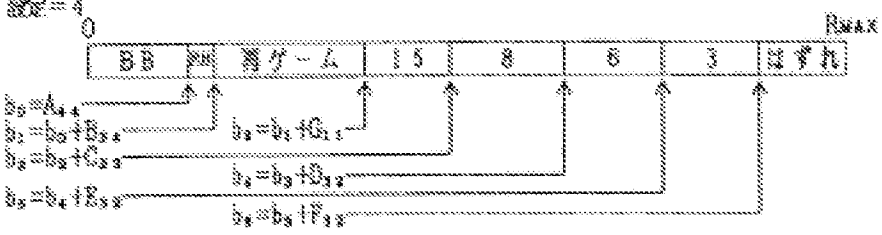
3枚掛け
小役判定モード＝高確率時
乱数変動カウンタ＝0
設定＝4

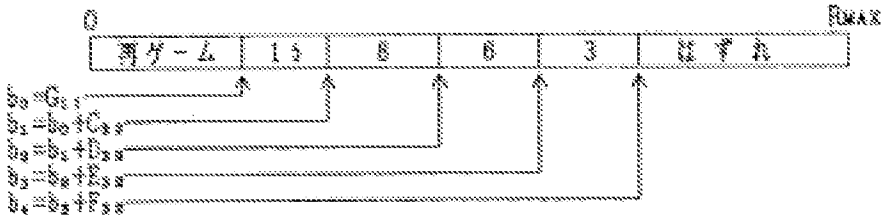
(α)

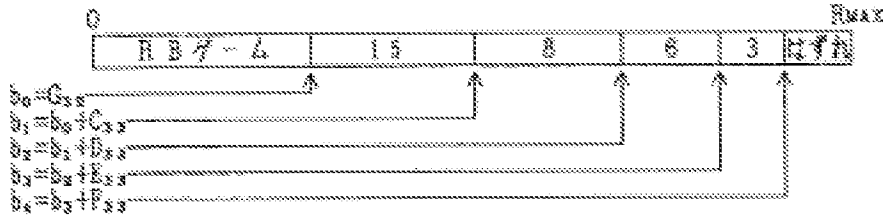


[Drawing 11]

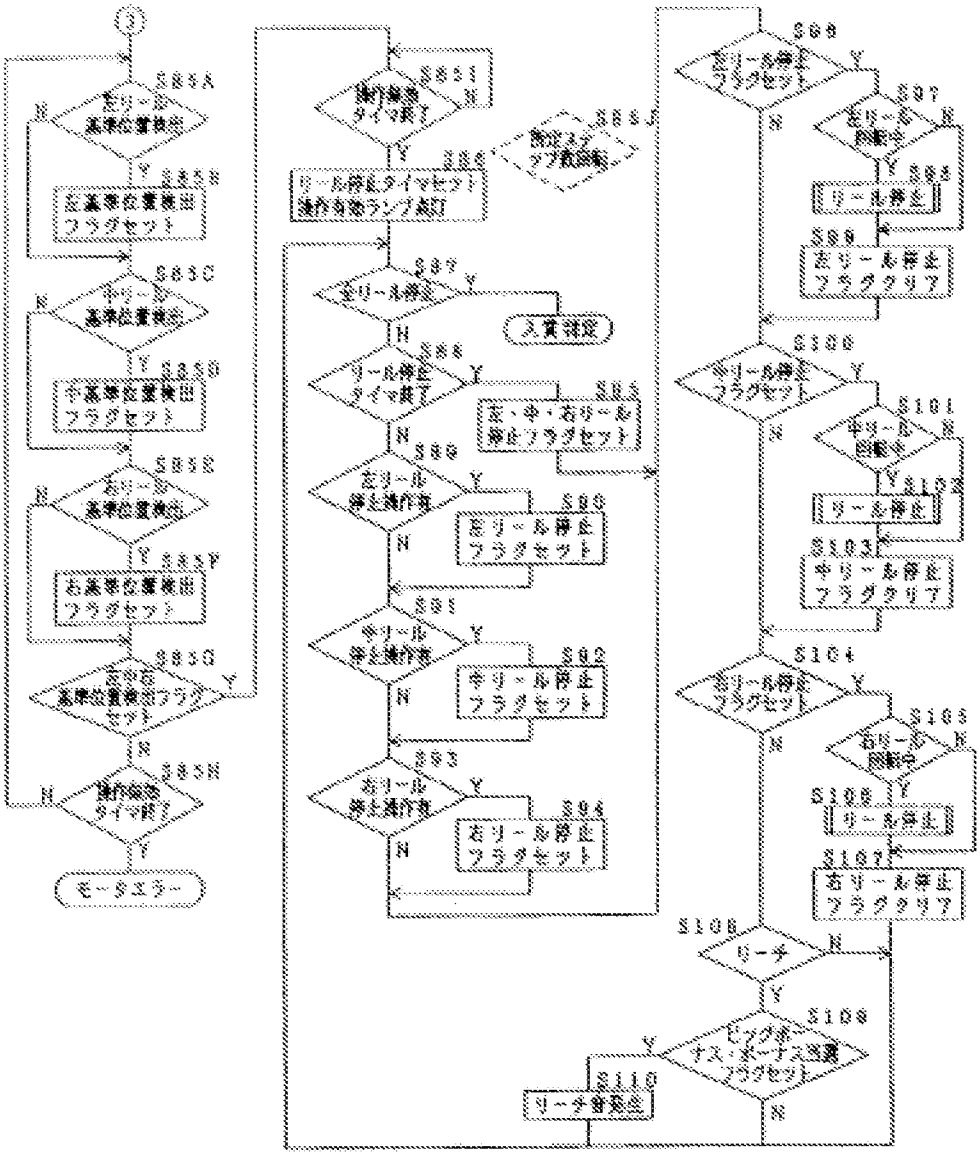

3枚揃い
小役特定モード＝通常時
（a）
連荘変動カウンタ＝0
設定＝4
0
RMAX
BB
RB
再ゲーム
15
8
6
3
はずれ


3枚揃い
小役特定モード＝高確率時
（b）
連荘変動カウンタ＝0
設定＝4
0
RMAX
BB
RB
再ゲーム
15
8
6
3
はずれ

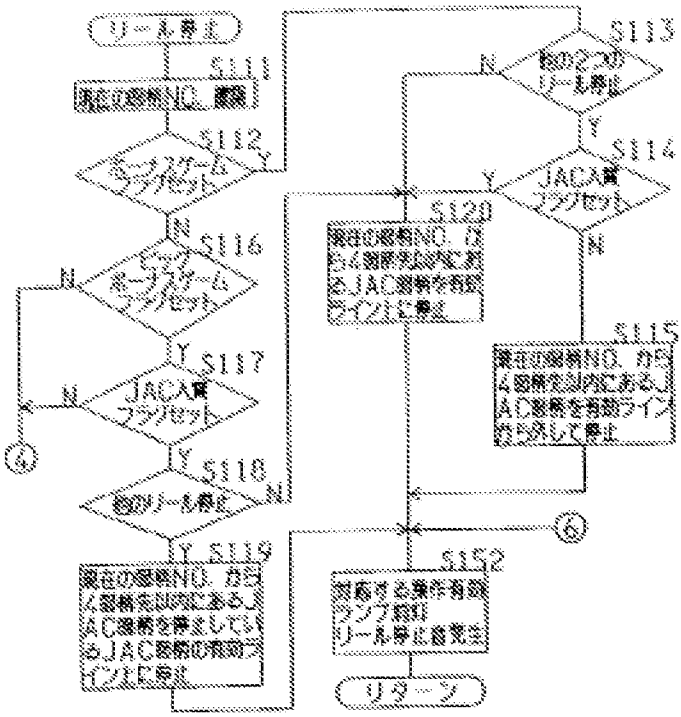

3枚揃い
小役特定モード＝高確率時
（c）
BBorRB当選フラグセット中
0
RMAX
再ゲーム
15
8
6
3
はずれ


3枚揃い
小役特定モード＝ビッグボーナス時
（d）
0
RMAX
再ゲーム
15
8
6
3
はずれ

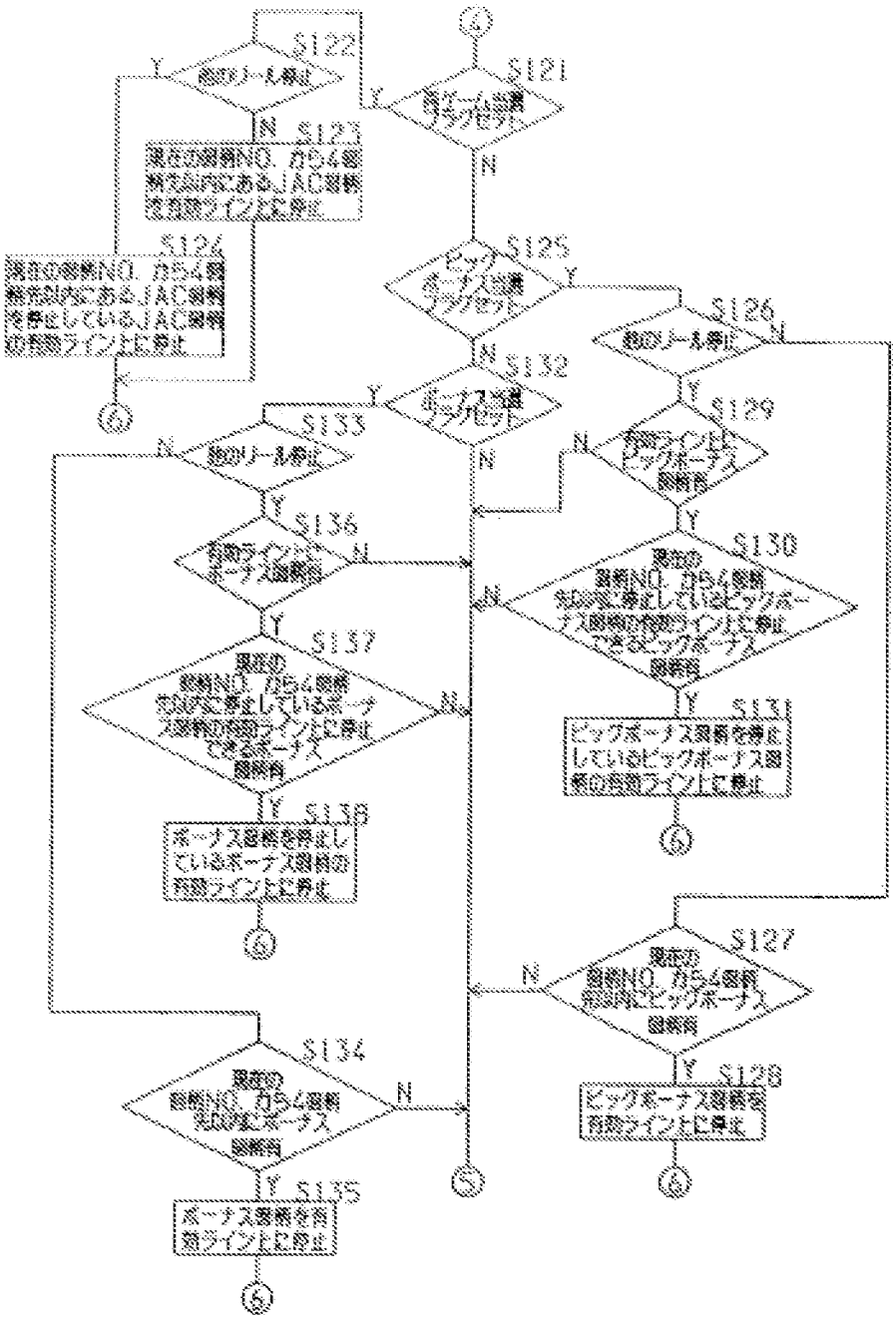
[Drawing 12]



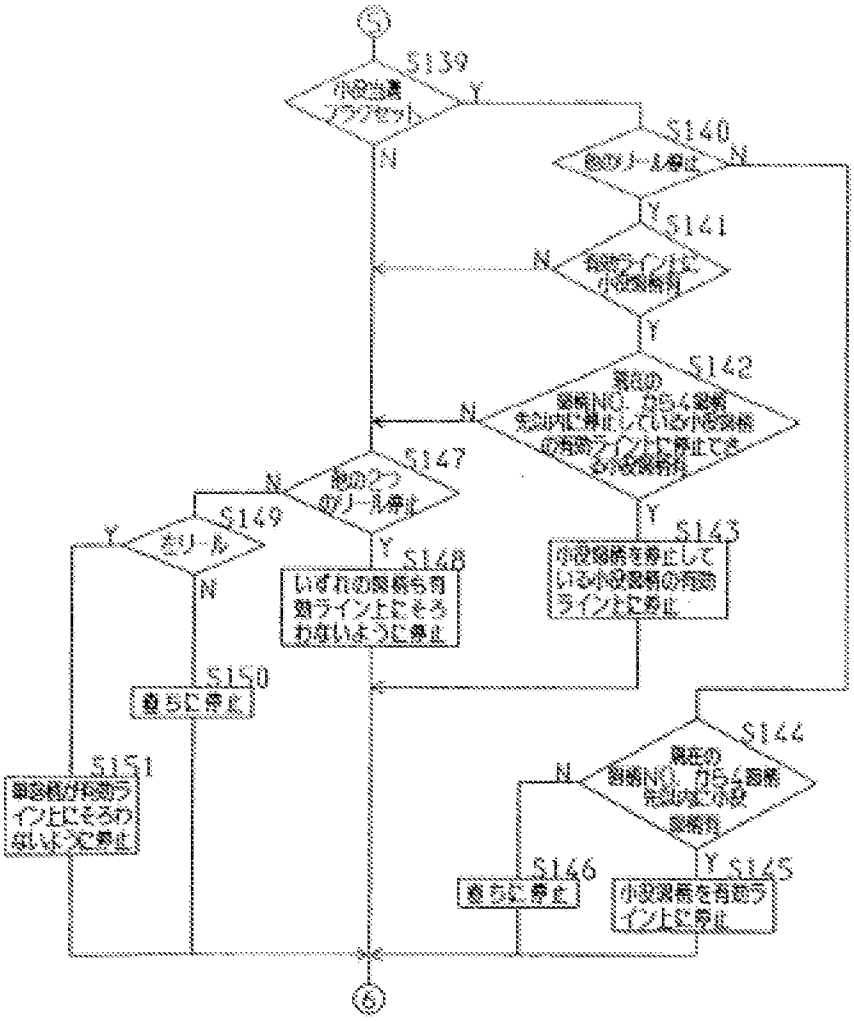
[Drawing 13]


リール停止
S111
S112
S113
S114
S115
S116
S117
S118
S119
S120
S152
リターン
④
⑥

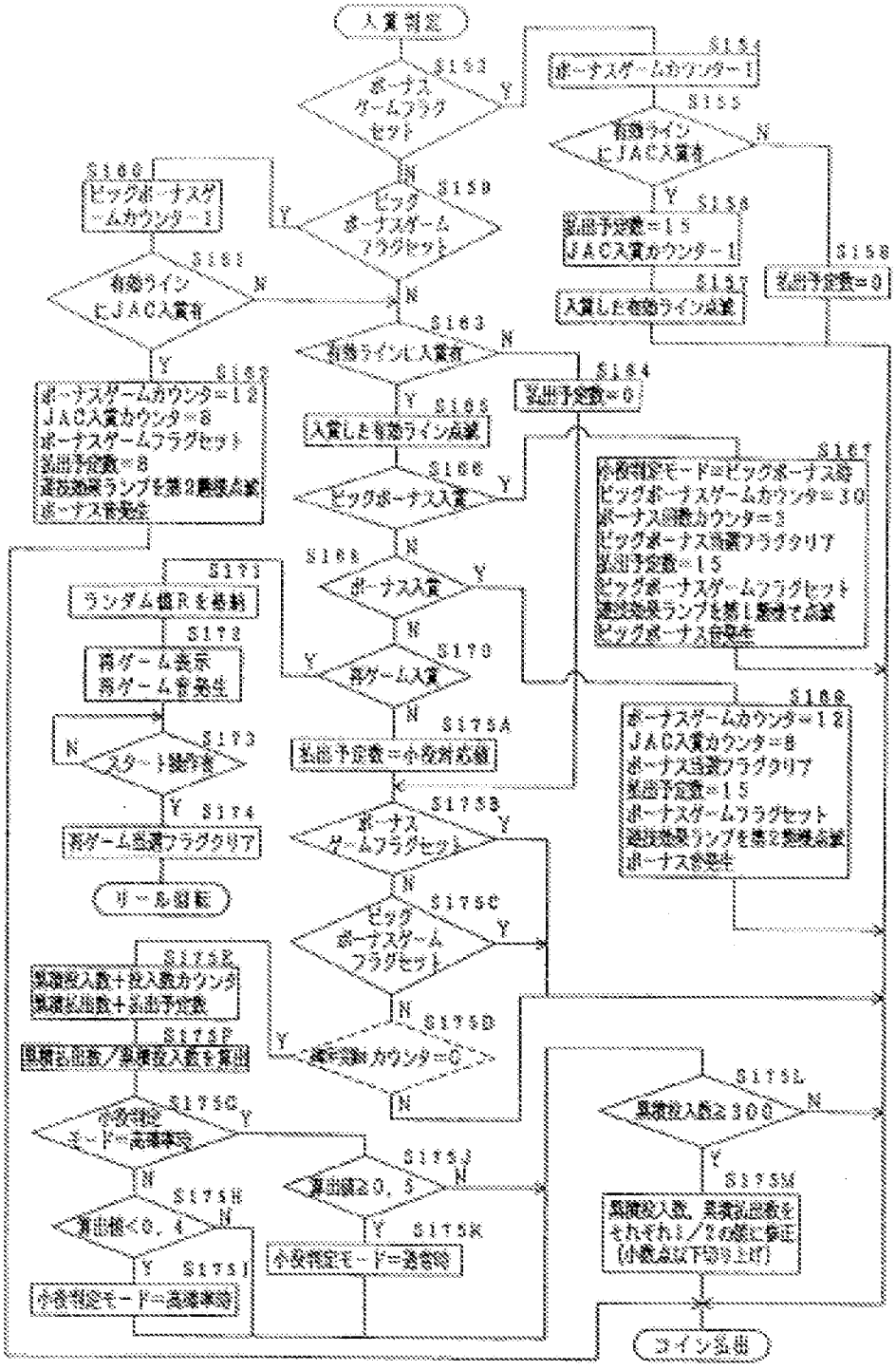
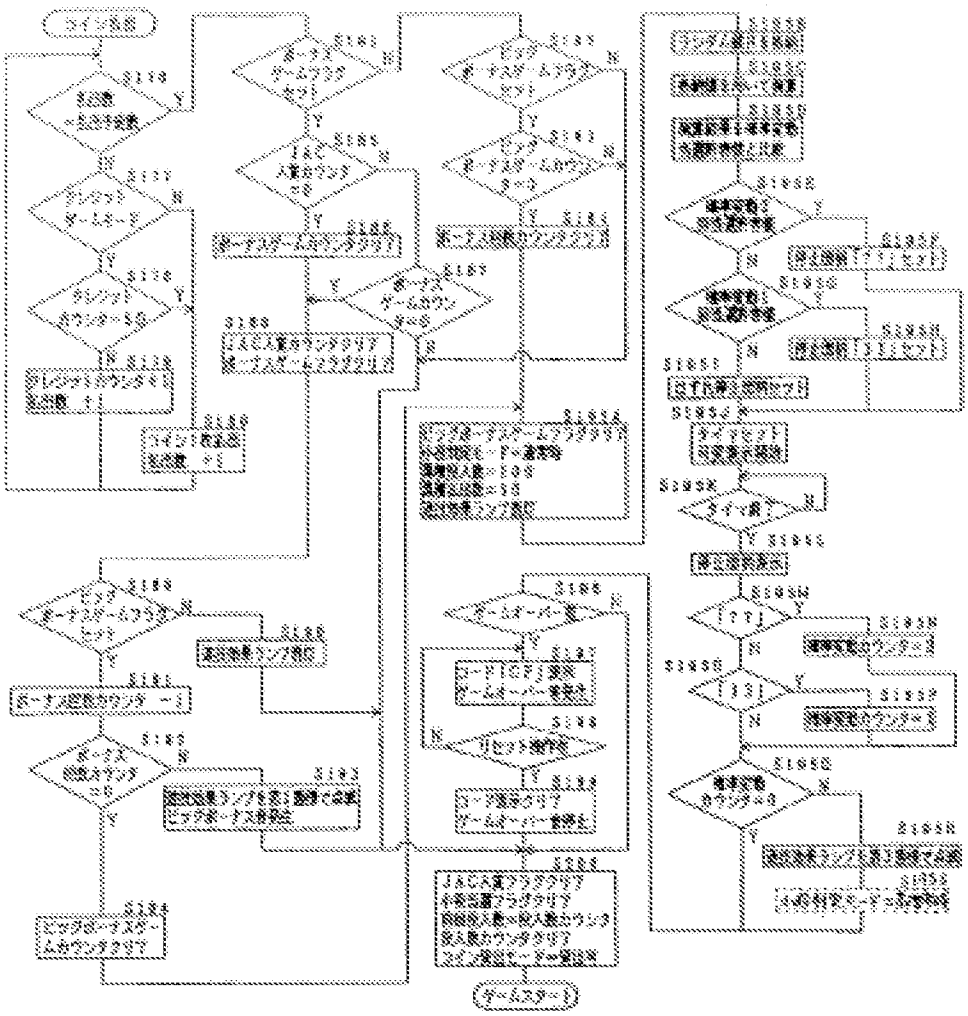
[Drawing 14]


S122
S121
S123
S124
S125
S126
S132
S129
S133
S136
S130
S137
S131
S138
S127
S134
S128
S135

[Drawing 15]


S139
N
Y
S140
N
Y
S141
N
Y
S142
N
Y
S147
N
Y
S149
Y
N
S148
S150
S151
S143
S144
N
Y
S146
S145

[Drawing 16]


入賞判定
S153
ボーナス
ゲームフラグ
セット
Y
N
S154
ボーナスゲームカウンター-1
S155
有効ライン
にJAC入賞有
N
Y
S156
払出予定数=15
JAC入賞カウンター-1
S157
入賞した有効ライン点滅
S158
払出予定数=0
S159
ビッグ
ボーナスゲーム
フラグセット
Y
N
S160
ビッグボーナスゲ
ームカウンター-1
S161
有効ライン
にJAC入賞有
N
Y
S162
ボーナスゲームカウンター=12
JAC入賞カウンター=0
ボーナスゲームフラグセット
払出予定数=0
遊技効果ランプを第2態様点滅
ボーナス作動中
S163
有効ラインに入賞有
N
Y
S164
払出予定数=0
S165
入賞した有効ライン点滅
S166
ビッグボーナス入賞
Y
N
S167
小役判定モード=ビッグボーナス中
ビッグボーナスゲームカウンター=30
ボーナス図柄カウンター=3
ビッグボーナス作動フラグクリア
払出予定数=15
ビッグボーナスゲームフラグセット
遊技効果ランプを第1態様で点滅
ビッグボーナス作動中
S168
ボーナスゲームカウンター=12
JAC入賞カウンター=0
ボーナス作動フラグクリア
払出予定数=15
ボーナスゲームフラグセット
遊技効果ランプを第2態様点滅
ボーナス作動中
S169
ボーナス入賞
Y
N
S170
再ゲーム入賞
Y
N
S171
ランダム値Rを更新
S172
再ゲーム表示
再ゲーム作動中
N
S173
スタート操作有
Y
S174
再ゲーム作動フラグクリア
リール回転
S175A
払出予定数=小役別払出
S175B
ボーナス
ゲームフラグセット
Y
N
S175C
ビッグ
ボーナスゲーム
フラグセット
Y
N
S175D
ボーナス図柄カウンター=0
Y
N
S175E
遊技状態入賞+役入賞カウンタ
遊技状態数+払出予定数
S175F
遊技状態/累積役入賞を算出
S175G
小役判定
モード選択中
Y
N
S175H
算出値<0.4
N
Y
S175I
小役判定モード選択解除
S175J
算出値≧0.3
N
Y
S175K
小役判定モード選択中
S175L
累積役入賞≧300
N
Y
S175M
累積役入賞、累積払出数を
それぞれ1/2の値に更正
[小数点以下切り上げ]
コイン払出

[Drawing 17]